```
February 21, 2004, 02:05:42; Search time 11154 Seconds (without alignments) 11391.904 Million cell updates/sec
                                                                                              5777422
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                              2888711 segs, 20454813386 residues
                                                                                                                                                                                                                               Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                      OM nucleic - nucleic search, using sw model
                                                                                                                                    IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 em_vi:*
em_htg_lvm:*
em_htg_lvv:*
em_htg_other:*
em_htg_other:*
em_htg_opln:*
em_htg_rod:*
em_htg_rod:*
em_htg_rod:*
em_htg_vrt:*
em_htg_vrt:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        em_htgo_mus:*
em_htgo_other:*
                                                                                                                                                                                                     Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                             gb ba: *
gb htg: *
gb om: *
gb ow: *
gb pat: *
gb vi: *
em fun: *
em fun: *
em ow: *
em ow: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          em_pat:*
em_ph:*
em_pl:*
em_ro:*
em_sts:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           em un:*
                                                                                                                                                                                                                                                                       GenEmbl:*
                                                                                                                                                                                                                                                                                                                                                                             Title:
Perfect score:
Sequence:
                                                                                                                                   Scoring table:
                                                                                                                                                                                                                                                                         Database :
                                                                                                                                                                  Searched:
                                                             Run on:
```

Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

AX395268 S 322 BC042822 BC042822 BC042822 BC042822 BC030532 BC4 AB037898 BC32532 H AC13208 H BC AC145 H BC AC16534 I BC AC16534 I BC AC16534 I BC AC16534 I BC AC16536 I BC AC16536 I BC AC1672 I BC AC16	Resul	ult No.	Score	* Query Match	* Query Match Length	DB	QI.	Description
1 3100 100.0 3106 10 AF042822 3 3102.8 99.9 3248 10 BC005496 4 2595 83.5 10 AB037898 6 1905.6 61.4 3273 9 BC030532 7 1889.8 60.7 3120 9 AF133086 10 1883.2 60.6 3147 6 AR229704 11 1883.2 60.6 3147 6 AR229704 12 1883.2 60.6 3147 6 AR229704 13 1883.2 60.6 3147 6 AR229704 14 1883.2 60.6 3147 6 AR229704 15 1883.2 60.6 3147 6 AR229704 16 1530.8 49.3 2900 6 AR229705 17 1530.8 49.3 2900 6 AR229705 18 1530.8 49.3 2900 6 AR229705 19 175.8 37.9 1823 9 BC018346 20 345.6 11.6 236387 2 AC014442 21 809.6 26.1 359.6 1823 9 BC018347 22 556.4 17.8 726 6 AR23373 23 623.2 20.1 225649 2 AC114442 24 556.4 17.8 726 6 AR23373 25 551.8 17.8 726 6 AR23373 26 359.6 11.6 236387 2 AC09642 27 701.2 25.6 11.6 236387 2 AC09645 28 359.6 11.6 236387 2 AC09645 29 306.8 9.9 434 6 AR237373 30 306.8 9.9 434 6 AR237373 31 26.5 9.9 434 6 AR2318876 32 240.8 7.8 2242 6 AR231876 33 239.2 7.7 3143 6 AR338208 44 AR338208 45 AR338208 47 AR338208 48 AR338208 49 AR338208 40 AR338208 41 AR338208 42 240.8 7.8 3104 6 AR38208 43 239.2 7.7 3143 6 AR338208 44 AR338208 45 AR338208 47 AR338208 48 AR338208 48 AR338208 49 AR338208 40 AR338208 41 AR338208 42 AR338208 43 AR338208 44 AR338208 45 AR338208 47 AR338208 48 AR338208 4	1		16	100	i	ן ע	152	95268 Seque
3 3102.8 99.9 3248 10 BC005496 5 2313.6 6 1.4 3273 9 BC030532 6 1905.6 61.4 3273 9 BC030532 8 1889.8 60.8 3149 9 AF113086 9 1884.8 60.7 3128 9 AF13086 9 1884.8 60.7 3128 9 AF13086 11 1883.2 60.6 3147 6 AR229704 12 1883.2 60.6 3147 6 AR229704 13 1883.2 60.6 3147 6 AR229704 14 1883.2 60.6 3147 6 AR229704 15 1883.2 60.6 3147 6 AR229704 16 1530.8 49.3 2900 9 BC005826 19 1175.8 37.9 2148 9 BC016826 19 1175.8 37.9 2148 9 BC018146 20 945.4 30.0 6 AR229705 21 175.8 37.9 2148 9 BC018146 22 701.2 22.6 1553 6 AR263832 24 552.4 17.9 723 6 B13204 25 551.8 17.8 723 6 AR263832 26 359.6 11.6 226.9 AC112632 27 359.6 11.6 2261906 28 359.6 11.6 2261906 29 9 434 6 AR27318 31 306.8 9.9 434 6 AR27318 32 244.8 7.8 3194 9 AY055384 34 242.8 7.8 244.9 9 AX38208 35 239.2 7.7 24079 2 AC12832 36 239.2 7.7 24079 2 AC12832 37 239.2 7.7 24079 2 AC12832 38 239.2 7.7 24079 2 AC12832 38 239.2 7.7 24079 2 AC12832 39 239.2 7.7 24079 2 AC12832 39 239.2 7.7 24079 2 AC12832 30 239.2 7.7 24079 2 AC12832 31 224.8 7.8 3194 9 AY055384 32 240.8 7.8 264.9 9 AX38208 34 232.2 7.7 24079 2 AC12832 35 239.2 7.7 24079 2 AC12832 36 239.2 7.7 24079 2 AC12832 37 239.2 7.7 24079 2 AC128364 38 239.2 7.7 24079 2 AC12832 38 239.2 7.7 24079 2 AC12832 39 239.2 7.7 24079 2 AC12832 30 239.2 7.7 24079 2 AC12832 31 224.8 7.8 3124 9 AX538208 32 240.8 7.8 267.8 57.8 57.8 57.8 57.8 57.8 57.8 57.8 5		۹ ۲	7 7	001	3106	10	04282	2822 Mus
4 2595 83.5 3174 10 AB049189 5 2313.6 74.5 2568 10 AB037898 6 61.4 3273.6 61.4 3273 1 1884.8 60.8 3149 9 AF118224 1 1884.8 60.7 3129 9 AF133086 1 11 1883.2 60.6 3147 6 AR229704 1 12 1883.2 60.6 3147 6 AR229704 1 1883.2 60.6 3147 6 AR229704 1 1883.2 60.6 3147 6 AR229704 1 1883.2 60.6 3147 6 AR229705 1 1 1530.8 49.3 2900 6 AR081725 1 1530.8 49.3 2900 6 AR081725 1 10 1530.8 49.3 2900 6 AR081725 1 10 1530.8 49.3 2900 6 AR229705 1 10 1530.8 49.3 2900 6 AR229705 1 20 20 22 20 2 20 2 20 2 20 2 20 2 20		٦ ٣	3105	66	3248	10	00549	5496
\$ 2313.6 74.5 2568 10 AB037898 6 1905.6 61.4 3273 9 BC030532 7 1889.8 60.8 3149 9 AF1132086 9 1884.8 60.7 3120 9 AF133086 10 1884.8 60.7 3120 9 AF133086 11 1883.2 60.6 3147 6 AR229704 11 1883.2 60.6 3147 6 AR229704 12 1883.2 60.6 3147 6 AR229704 14 1883.2 60.6 3147 6 AR229704 15 1530.8 49.3 2900 6 AR081725 16 1530.8 49.3 2900 6 AR081725 17 1530.8 49.3 2900 9 HSU20428 19 1530.8 49.3 2900 9 HSU20428 1175 8 37.9 2148 9 BC018346 20 445.3 220 6 AR229705 17 1530.8 49.3 2900 6 AR034998 20 701.2 22.6 1553 6 AR23337 2 AC11442 22 701.2 22.6 1553 6 AR23337 2 AC11442 22 3 556.4 17.8 726 6 AR23737 2 AC12632 22 359.6 11.6 236387 2 AC12632 2 A		۱۹	10	83	3174	10	4918	Kattus
6 1905.6 61.4 3273 9 BC030532 7 1889.8 60.8 3149 9 AF118024 8 1884.6 60.7 3128 9 AB030036 9 1884.6 60.7 3128 9 AB030036 10 1883.2 60.6 3147 6 AR229712 11 1883.2 60.6 3147 6 AR229712 13 1883.2 60.6 3147 6 AR229705 14 1883.2 60.6 3147 6 AR229705 15 1883.2 60.6 3147 6 AR227095 16 1530.8 49.3 2900 6 AR22705 17 1530.8 49.3 2900 9 HSU20428 18 1530.8 49.3 2900 9 HSU20428 19 1175.8 37.9 2148 9 BC018146 20 945.4 30.0 1 2526 4 AR23302 22 701.2 22.6 1553 6 AR26383 24 552.4 17.9 726 6 AR23304 25 551.8 17.9 726 6 AR23304 26 359.6 11.6 251906 2 AC112632 27 359.6 11.6 261906 2 AC12632 28 359.6 11.6 27797 2 AC128347 30 306.8 9.9 434 6 AR27318 31 306.8 9.9 434 6 AR27318 32 244.8 7.8 244.9 182319 32 240.8 7.8 244.9 7.8 3194 9 AY055384 34 239.2 7.7 240.9 6 AX360098 36 239.2 7.7 240.9 6 AX360098 37 239.2 7.7 3143 6 AX38206 40 239.2 7.7 3143 6 AX38206 41 232.2 6.8 18236 2 AC012672 42 212.2 6.8 18236 2 AC021672 43 212.2 6.8 18236 2 AC021672 44 2 212.2 6.8 18236 2 AC021672		יו	23.1	74	2568	10	3789	Race
1884.8 60.8 3149 9 AF118224 1884.8 60.7 3128 9 AF133086 1884.8 60.6 3147 6 AR2037034 11 1883.2 60.6 3147 6 AR2037034 12 1883.2 60.6 3147 6 AR2037034 13 1883.2 60.6 3147 6 AR2037034 14 1883.2 60.6 3147 6 AR203703 15 1530.8 49.3 2900 6 AR203705 15 1530.8 49.3 2900 6 AR203705 17 1530.8 49.3 2900 6 AR203705 18 175.8 37.9 2148 9 BC005826 19 1175.8 37.9 2148 9 BC005826 19 1175.8 37.9 2148 9 BC005826 20 345.4 30.4 1823 9 BC0058498 21 20.1 22549 2 AR203932 22 356.4 17.8 723 6 B13204 24 556.4 17.8 723 6 B13204 25 359.6 11.6 256387 2 AC12632 26 359.6 11.6 256387 2 AC12632 26 359.6 11.6 256387 2 AC12632 25 359.6 11.6 277797 2 AC128347 30 306.8 9.9 434 6 AR207903 31 244.8 7.8 3194 9 AY538208 32 240.8 7.8 3194 9 AX538206 33 244.8 7.8 3194 6 AX338206 44 2 239.2 7.7 240079 2 AC12672 45 212.2 6.8 182736 2 AC012672 46 212.2 6.8 182736 2 AC012672 47 212.2 6.8 182736 2 AC012672 48 212.2 6.8 182736 2 AC012672 49 212.2 6.8 182736 2 AC012672 44 212.2 6.8 182736 2 AC012672 45 212.2 6.8 182736 2 AC012672 46 212.2 6.8 182736 2 AC012672 47 212.2 6.8 182736 2 AC012672 48 212.2 6.8 182736 2 AC012672 49 212.2 6.8 182736 2 AC012672 41 212.2 6.8 182736 2 AC012672 42 212.2 6.8 182736 2 AC012672 44 212.2 6.8 182736 2 AC012672 45 212.2 6.8 182736 2 AC012672 47 212.2 6.8 182736 2 AC012672 48 212.2 6.8 182736 2 AC012672 48 212.2 6.8 182736) L	100	61	3273	6	53	Ношо
1884.6 60.7 3120 9 AF133086 1884.6 60.7 3128 9 AF133086 1884.6 60.6 3147 6 AR229704 11 1883.2 60.6 3147 6 AR229704 12 1883.2 60.6 3147 6 AR229704 13 1883.2 60.6 3147 6 AR229704 14 1883.2 60.6 3147 6 AR229704 15 1883.2 60.6 3147 6 AR207995 15 1883.2 60.6 3147 6 AR207995 15 1883.2 60.6 3147 6 AR207995 15 1893.2 60.6 3147 6 AR207995 16 1530.8 49.3 2900 6 AR021725 18 1550.8 49.3 2900 6 AR021725 18 1550.8 49.3 2900 6 AR01446 20 245.4 37.9 2148 9 BC018146 21 22 22.6 359.6 155.3 6 AR26383 22 701.2 22.6 155.3 6 AR26383 23 623.2 20.1 225649 2 AC11444 24 24.8 7.8 244.9 AR27373 306.8 9.9 434 6 AR26387 31 306.8 9.9 434 6 AR26389 32 244.8 7.8 3194 9 AR055384 34 244.8 7.8 3194 9 AR055384 35 240.8 7.8 244.9 7.8 36 239.2 7.7 3143 6 AR38208 41 239.2 7.7 3143 6 AR38208 42 212.2 6.8 18735 2 AC011672 43 212.2 6.8 18735 2 AC011672 44 212.2 6.8 18735 2 AC011672 45 212.2 6.8 18735 2 AC011672 46 212.2 6.8 18735 2 AC011672 47 212.2 6.8 18735 2 AC011672 48 212.2 6.8 18735 2 AC011672 49 212.2 6.8 18735 2 AC011672 40 212.2 6.8 18735 2 AC011672 41 212.2 6.8 18735 2 AC011672 42 212.2 6.8 18735 2 AC011672 44 212.2 6.8 18735 2 AC011672 45 212.2 6.8 18735 2 AC011672 46 47 47 47 47 47 47 47		1 0	9 00	9 9		σ.	1822	Ношо
9 1884.6 60.7 3128 9 AB030036 11 1883.2 60.6 3147 6 ARC29712 12 1883.2 60.6 3147 6 ARC29712 13 1883.2 60.6 3147 6 ARC297145 14 1883.2 60.6 3147 6 ARC29745 15 1530.8 49.3 2900 6 ARC29705 17 1530.8 49.3 2900 9 HSU20428 18 1530.8 49.3 2900 9 HSU20428 19 1175.8 37.9 2148 9 BC018146 20 445.4 30.9 49.3 2900 9 HSU20428 21 701.2 22.6 1553 6 ARC3832 22 701.2 22.6 1553 6 ARC3832 23 623.2 20.1 225649 2 AC116542 24 552.4 17.9 723 6 B13204 25 551.8 17.8 723 6 ARC3832 26 359.6 11.6 23638 2 AC12632 27 359.6 11.6 23638 2 AC12632 28 552.8 17.9 723 6 ARC3832 29 434 6 ARC77318 31 306.8 9.9 434 6 ARC77318 32 240.8 7.8 2449 9 AC05905 34 242.4 7.8 3194 9 AVC55384 35 239.2 7.7 3143 6 AXC38208 36 239.2 7.7 3143 6 AXC38208 37 239.2 7.7 3143 6 AXC38208 38 239.2 7.7 3143 6 AXC38208 40 239.2 7.7 3142 9 AC012672 41 232.2 6.8 18236 2 AC021672 42 212.2 6.8 18236 2 AC021672 43 212.2 6.8 18236 2 AC021672		- α	188	9		6	AF133086	
10 1883.2 60.6 3147 6 AR081724 11 1883.2 60.6 3147 6 AR2297044 12 1883.2 60.6 3147 6 AR2297044 13 1883.2 60.6 3147 6 AR2297045 14 1883.2 60.6 3147 6 AR2207945 14 1883.2 60.6 3147 6 AR2079705 14 1883.2 60.6 3147 6 AR2079705 15 1530.8 49.3 2900 6 AR081725 16 1530.8 49.3 2900 6 AR081726 19 1175.8 37.9 2148 9 BC005826 19 1175.8 37.9 2148 9 BC005826 19 10.9 6 22.0 2 20.0 5 AR263832 21 701.2 22.6 155.3 6 AR263832 22 701.2 22.6 155.3 6 AR263832 23 623.2 20.1 225649 2 AR263832 24 556.4 17.9 72.6 B13.04 25 359.6 11.6 236387 2 AC12632 27 359.6 11.6 261906 2 AC12632 28 359.6 11.6 261906 2 AC12632 29 306.8 9.9 43.4 6 AR263137 26 359.6 11.6 277797 2 AC128347 26 359.2 11.6 240.8 7.8 2672 6 AX261852 33 244.8 7.8 3194 9 AV5538208 34 239.2 7.7 244079 2 AC128364 24 536. 11.6 240.9 AX38208 25 240.8 7.8 2672 6 AX261903 26 239.2 7.7 244079 2 AC128364 27 239.2 7.7 3143 6 AX38206 27 239.2 7.7 3143 6 AX38206 28 239.2 7.7 24079 2 AC128364 28 212.2 6 8 182736 2 AC012672 29 316.8 7.8 1245 9 AR207903 29 212.2 6 8 182736 2 AC012672 24 512.2 6 8 182736 2 AC012672		0	9 4	9		σ	AB030036	нощо
11 1883.2 60.6 3147 6 AR229704 12 1883.2 60.6 3147 6 AR229712 13 1883.2 60.6 3147 6 AX207945 14 1883.2 60.6 3147 6 AX207945 14 1883.2 60.6 3147 6 AX207945 15 1883.2 60.6 3147 6 AX207945 16 1530.8 49.3 2900 6 AR229705 17 1530.8 49.3 2900 6 AR229705 18 1530.8 49.3 2900 6 AR229705 19 1175.8 37.9 2148 9 BC005826 20 445.4 30.4 1823 9 BC018146 20 445.4 17.8 2449 5 AR248498 21 809.6 26.1 3487 5 AR38939 22 701.2 22.6 1553 9 AC114442 24 556.4 17.8 726 6 AX26393 25 556.4 17.8 726 6 AX27318 26 359.6 11.6 26190 2 AC11845 27 359.6 11.6 26190 2 AC118632 28 359.6 11.6 26190 2 AC12834 29 306.8 9.9 434 6 AX261852 29 306.8 9.9 434 6 AX261852 20 306.8 9.9 434 6 AX261852 20 306.8 9.9 434 6 AX261852 21 306.8 9.9 434 6 AX261852 22 240.8 7.8 3194 9 AX261808 23 240.8 7.8 3194 6 AX38208 240.8 7.8 3104 6 AX36019 23 239.2 7.7 3143 6 AX38208 24 239.2 7.7 3143 6 AX38208 24 212.2 6 8 18736 2 AC012672 24 212.2 6 8 18736 2 AC012672		,	9 6	9		9	AR081724	₩.
12 1883.2 60.6 3147 6 AR229712 13 1883.2 60.6 3147 6 AX207945 14 1883.2 60.6 3147 6 AX207945 15 1883.2 60.6 3147 9 AR227745 16 1530.8 49.3 2900 6 AR081725 18 1530.8 49.3 2900 9 HSU20428 19 1175.8 37.9 2148 9 BC008286 20 945.4 30.9 2148 9 BC008286 21 1015.8 37.9 2148 9 BC008386 22 701.2 22.6 1553 6 AR263832 22 701.2 22.6 1553 6 AR263832 22 701.2 22.6 1553 6 AR263832 24 556.4 17.9 723 6 B13204 25 551.8 17.8 723 6 B13204 25 551.8 17.8 723 6 AR26383 26 359.6 11.6 236387 2 AC12632 28 359.6 11.6 236387 2 AC126347 29 306.8 9.9 434 6 AX261852 33 244.8 7.8 3194 9 AY055384 34 242.4 7.8 3194 9 AY055384 35 240.8 7.8 2449 9 HSA319876 36 239.2 7.7 1327 6 AX38208 37 240.8 7.8 2449 9 AX38208 38 239.2 7.7 1327 6 AX38208 40 239.2 7.7 1327 6 AX38208 41 212.2 6 8 182736 2 AC012672 42 212.2 6 8 182736 2 AC012672		1 -	9 00	9		9	AR229704	₩.
13 1883.2 60.6 3147 6 AX207945 14 1883.2 60.6 3147 6 AX207945 15 1883.2 60.6 3147 6 AX207945 15 1883.2 60.6 3147 6 AX207945 16 1830.8 49.3 2900 6 AR081725 18 1530.8 49.3 2900 6 AR081725 19 1175.8 37.9 2900 6 AR08146 20 945.4 30.4 1823 9 BC008498 21 109.6 26.1 1823 9 BC008498 22 701.2 22.6 1553 6 AR263832 24 556.4 17.8 723 6 B13204 25 551.8 17.8 723 6 B13204 25 551.8 17.8 723 6 B13204 26 359.6 11.6 261906 2 AC112632 27 359.6 11.6 261906 2 AC12632 29 306.8 9.9 43.4 6 AX207318 31 306.8 9.9 43.4 6 AX207903 32 240.8 7.8 244.9		1 0	0 0			9	AR229712	N
14 1883.2 60.6 3147 6 AX207945 15 1883.2 60.6 3147 9 AX207945 16 1530.8 49.3 2900 6 AR229705 17 1530.8 49.3 2900 6 AR229705 18 1530.8 49.3 2900 6 AR229705 19 1175.8 37.9 2148 9 BC008826 20 455.4 30.4 1823 9 BC018146 21 809.6 22.1 3487 5 AR26382 22 623.2 20.1 225649 2 AC114542 24 556.4 17.8 726 6 AX20305 25 359.6 11.6 236387 2 AC12632 26 359.6 11.6 236387 2 AC12632 27 359.6 11.6 236387 2 AC12632 28 306.8 9.9 434 6 AX20703 30 306.8 9.9 434 6 AX207093 31 244.8 7.8 244.9 AX207903 32 240.8 7.8 244.9 AX238208 34 239.2 7.7 1327 6 AX338206 40 239.2 7.7 1327 6 AX338206 41 238 7.7 240.9 6 AX36098 42 212.2 6 8 18735 2 AC01872 43 212.2 6 8 18735 2 AC01872 44 212.2 6 8 18735 2 AC01872 45 212.2 6 8 18735 2 AC01872 46 212.2 6 8 18735 2 AC01872 47 212.2 6 8 18735 2 AC01872		4 6	9 0	, ,		9	AX207897	9
15 1883.2 60.6 3147 9 AF057145 16 1530.8 49.3 2900 6 AR229705 17 1530.8 49.3 2900 6 AR229705 18 1530.8 49.3 2900 9 HSU20428 19 1175.8 37.9 2148 9 BC00826 20 945.4 30.4 1823 9 BC018146 21 701.2 22.6 18.3 6 AR268832 22 701.2 22.6 1553 6 AR268832 24 556.4 17.9 726 6 AR268832 25 551.8 17.8 726 6 AR26845 26 359.6 11.6 261906 2 AC12632 28 359.6 11.6 261906 2 AC12632 29 306.8 9.9 43.4 6 AR27318 31 306.8 9.9 43.4 6 AR27318 32 244.8 7.8 3194 9 AY265384 35 240.8 7.8 3194 9 AY267905 37 240.8 7.8 3104 6 AX207905 38 239.2 7.7 3143 6 AX538208 39 239.2 7.7 3143 6 AX538208 40 239.2 7.7 3143 6 AX538208 41 212.2 6.8 190314 9 AC018227		7 7	9 00	ĕ		ø	AX207945	
15 1530.8 49.3 2900 6 AR081725 17 1530.8 49.3 2900 6 AR229705 18 1530.8 49.3 2900 6 AR229705 19 1175.8 37.9 2900 9 HSU20428 19 1175.8 37.9 2148 9 BC008826 20 945.4 30.4 1823 9 BC01846 21 701.2 22.6 1553 6 AR23832 22 551.8 17.8 723 6 AR23832 24 556.4 17.8 723 6 B13.04 25 551.8 17.8 723 6 B13.04 26 359.6 11.6 261906 2 AC126332 27 359.6 11.6 261906 2 AC126332 28 359.6 11.6 261906 434 6 AR23837 29 306.8 9.9 434 6 AR23837 244.8 7.8 3194 9 AX261852 34 240.8 7.8 3194 9 AX261905 35 240.8 7.8 3194 9 AX383208 36 239.2 7.7 1327 6 AX383009 37 239.2 7.7 3143 6 AX3836098 38 239.2 7.7 3143 6 AX3836098 39 239.2 7.7 3143 6 AX3836098 44 212.2 6.8 190314 9 A001183		† u	9 0	, <u>c</u>		6	AF057145	
17 1530.8 49.3 2900 6 AR229705 18 1530.8 49.3 2900 9 HSV20428 19 1175.8 49.3 2900 9 HSV20428 20 945.4 30.4 1823 9 BC008826 21 809.6 26.1 3487 5 AR038498 22 621.2 22.6 1553 6 AR263832 23 623.2 20.1 225649 2 AC114542 24 556.4 17.8 725 6 B13204 25 359.6 11.6 236387 2 AC12632 27 359.6 11.6 236387 2 AC12632 28 359.6 11.6 27737 2 AC128347 29 306.8 9.9 434 6 AR273337 30 306.8 9.9 434 6 AR273338 31 244.8 7.9 3188 10 AR261852 32 240.8 7.8 244.9 9 HSA319876 35 239.2 7.7 1327 6 AX538208 36 239.2 7.7 1327 6 AX538208 37 239.2 7.7 1327 6 AX538208 38 239.2 7.7 1327 6 AX538208 39 239.2 7.7 1327 6 AX538208 40 239.2 7.7 1343 6 AX538208 41 238 7.7 240079 2 AC128364 42 212.2 6.8 182736 2 AC018727 44 212.2 6.8 182736 2 AC018727		7 7	ם ה ה	4		9	AR081725	
18 1530.8 49.3 2900 9 HSU20428 19 1175.8 37.9 2148 9 BC0018146 20 945.4 37.9 2148 9 BC0018146 21 071.2 22.6 1553 6 AR028498 22 701.2 22.6 1553 6 AR028498 23 551.8 17.8 724 6 AX473052 24 551.8 17.8 723 6 B13204 25 551.8 17.8 723 6 B13204 26 359.6 11.6 236387 2 AC126342 27 359.6 11.6 27797 2 AC12634 30 306.8 9.9 43.4 6 AX26870 31 306.8 9.9 43.4 6 AX268870 32 240.8 7.8 3194 9 AX055384 35 240.8 7.8 2649 9 HSA319876 36 239.2 7.7 3143 6 AX538208 37 239.2 7.7 3143 6 AX538208 38 239.2 7.7 3143 6 AX538208 41 239.2 7.7 3143 6 AX538208 42 232.2 6 8 12458 9 AX01183 43 212.2 6 8 182736 2 AC012672 44 212.2 6 8 182736 2 AC01183 45 212.2 6 8 182736 2 AC01182		3 0	1 -	. 4		v	AR229705	AR229705 Sequence
19 175.0 37.9 2148 9 BCO05826 20 945.4 30.4 1823 9 BCO05826 21 701.2 22.6 1553 6 AR263832 22 623.2 20.1 225649 2 AR263832 24 551.8 17.8 723 6 B13.04 25 55.8 17.9 723 6 B13.04 26 359.6 11.6 261906 2 AC116332 27 359.6 11.6 261906 2 AC126332 30 306.8 9.9 434 6 AR27331 31 26.8 9.9 434 6 AR27331 32 244.8 7.8 3194 9 AX261852 34 240.8 7.8 2449 9 AX261853 35 240.8 7.8 2449 9 AX38208 36 239.2 7.7 1327 6 AX538208 37 239.2 7.7 1327 6 AX538208 38 239.2 7.7 1327 6 AX538208 39 239.2 7.7 1327 6 AX538208 44 212.2 6.8 152736 2 AC016327 44 212.2 6.8 152736 2 AC016727		- C	1 1			σ	HSU20428	U20428 Human SNC19
19 1.75.8 3.4 1823 9 BC018146 21 809.6 26.1 3487 5 AB038498 22 701.2 22.6 13487 5 AB038498 23 623.2 20.1 225649 2 AC114542 24 556.4 17.9 726 6 AX473052 25 359.6 11.6 261906 2 AC112632 27 359.6 11.6 261906 2 AC112632 29 359.6 11.6 261906 2 AC112632 31 306.8 9.9 434 6 AR277318 31 306.8 9.9 434 6 AR277318 31 306.8 9.9 434 6 AR277318 31 244.8 7.8 3194 9 AX368770 35 240.8 7.8 3194 9 HSA319876 35 240.8 7.8 2672 6 AX207905 37 240.8 7.8 2672 6 AX207905 38 239.2 7.7 1327 6 AX538208 39 239.2 7.7 1327 6 AX538208 39 239.2 7.7 1327 6 AX538208 30 239.2 7.7 1327 6 AX538208 31 238 239.2 7.7 1327 6 AX538208 32 212.2 6.8 190314 9 AX019227		9 0	10	'n		·σ	BC005826	BC005826 Homo sapi
21		7 6	10	י ה		σ	BC018146	BC018146 Homo sapi
22 701.2 22.6 1553 6 AR263832 AR263832 AR263832 2 2 701.2 22.6 1553 6 AR263832 AR263832 2 2 701.2 22649 2 AR473052 2 2 2 26449 2 AR473052 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		א כ	י מ מ	'n		2	AB038498	AB038498 Xenopus 1
23 623.2 20.1 225649 2 AC114542 AC11253 AC1153 AC11632 AC11632 AC11632 AC11632 AC10642 AC10642 AC11632 AC10642 AC11632 AC12632 AC126347 AC1263447 AC126347 AC126347 AC1263447 AC126347 AC1263447 AC126347 AC1263447 AC126347 AC126347 AC12634		1 0	9 6	10		9	AR263832	
25 55.4 17.9 726 6 AX473052 B13204 Hungles 26 551.8 17.8 725 6 E12204 AC096042 27 551.8 17.8 723 6 E12204 AC096042 28 551.8 17.8 723 6 AC12632 28 359.6 11.6 265906 2 AC112632 28 306.8 9.9 434 6 AR277377 31 306.8 9.9 434 6 AR277377 32 24.8 7.8 3194 9 AX26870 32 240.8 7.8 3194 9 AX26870 35 240.8 7.8 3194 9 AX267905 36 240.8 7.8 3104 6 AX207905 37 240.8 7.8 3104 6 AX207905 38 239.2 7.7 3143 6 AX538208 AX560098 AX560098 39 239.2 7.7 3143 6 AX538208 AX538206 AX212334 AX207903 30 239.2 7.7 3143 6 AX538208 AX538206 AX212334 AX538206 AX212334 AX538206 AX212334 AX538206 AX212334 AX538206 AX212334 AX538206 AX2122 6.8 190314 9 AC015227 AX557572 AX36873 AX57572		7 (ič	c	· C	AC114542	
25 551.8 17.8 723 6 E13204 ACCOSCA2 PRINCES PR		7 0	9 11	-	1	v	AX473052	AX473052 Sequence
25 351.6 11.6 236387 2 AC096042 AC12632 AC12632 2 359.6 11.6 240.8 2 AC12632 AC12632 AC12632 AC12632 2 306.8 9.9 434 6 AR273318 AR273318 AR2737318 AR277318 AR277905 AR270905 AR270906 AR270905 AR270908 AR270008 AR2700008 AR270008 AR270008 AR270008 AR270008 AR2700008 AR270008 AR27000		4 1	חנ	4 -		v	E13204	Human cDN
26 359.6 11.6 261906 2 AC112632 AC112632 AC122632 E		7 7	0 0	4 +	c	0	AC096042	Rattus
27 535.6 11.0 241.797 2 ACCI28347 ACCI28347 ACCI28347 B 359.6 11.0 241.797 2 ACCI28347		9 1	ባር	4 +	4 6	۱,	AC112632	
28 539.8 1.9 4.34 6 AR273337 AR273337 SH273337 SH273337 SH273318 306.8 9.9 434 6 AR273337 SH273318 AX368770 AX261852 SH26.8 9.9 434 6 AX261852 SH273318 AX368770 AX261852 SH273318 AX261852 SH273318 AX261852 SH273314 SH273318 AX261852 SH274.8 7.8 3194 9 AX267395 AX267396 AX366098 AX3		1.7	יי ני	-	4 (10	AC1 28347	
29 306.8 9.9 434 6 AR277318 AR277318 AR277318 31 306.8 9.9 434 6 AR261852 AX261852 AX261852 32 265 8.5 3183 10 BC029645 BC029645 34 242.4 7.8 3194 9 AX261852 BC029645 34 242.4 7.8 3194 9 AX261852 BC029645 35 240.8 7.8 2440.8 7.8 2440.8 AX201993 37 240.8 7.8 3104 6 AX207903 AX207903 38 239.2 7.7 1327 6 AX538208 AX530208 40 239.2 7.7 2143 6 AX538208 AX538206 41 238 7.7 240079 2 AC128364 AX538206 42 212.2 6.8 1343.6 AX538206 AC021334 42 212.2 6.8		0 0	9 (4	4	1 4	AR273737	
31 306.8 9.9 434 6 AXX68770 AXX68770 8 32 246.8 7.9 1314 6 AXX681852 BC022645 AXX68770 8 244.8 7.9 3194 9 AXX681852 BC022645 AXX68784 34 244.8 7.9 3194 9 AXX651854 AXX65384 34 240.8 7.8 240.9 7.8 240.8 7.8 240.9 AXX07905 AXX07905 37 240.8 7.8 3104 6 AXX207905 AXX207903 39 239.2 7.7 240.9 6 AXX58208 AXX60098 AXX600098 AXX6000098 AXX6000098 AXX6000098 AXX600098 AXX600098 AXX600098 AXX600098 AXX6000098 AX		2 0	7 (y v	AP277318	_
31 506 8.5 591 6 AX261852 AX261852 33 244.8 7.9 3183 10 BC029645 BC029645 BC029645 34 242.4 7.8 31949 9 AX055384 AX055384 AX055384 AX205384 AX205384 AX205384 AX207905 35 240.8 7.8 2672 6 AX207905 AX207905 AX207905 39 239.2 7.7 1327 6 AX538208 AX538208 AX360098 39 239.2 7.7 240.9 6 AX360098		9 6	7			v	5X368770	
3.2 244.8 7.9 3183 10 BC029645 BC029645 34 242.4 7.8 3194 9 AV055384 AV055384 AX055384 AX07905 37 240.8 7.8 240.6 AX207903 AX207903 38 239.2 7.7 1327 6 AX538208 AX538206 AX05038 AX538206 AX05038 7.7 240079 2 AX538206 AX05038 AX538206 AX05038 AX538206 AX05038 AX538206 AX05038 AX05032 A		31	ก			o vo	AX261852	
3.4 244.8 7.9 3194 9 HS53184 AND55384 AND55384 35 240.8 7.8 2449 9 HS5319876 AX207905 36 240.8 7.8 2649 9 KX207905 AX207905 AX207905 AX207903 39 239.2 7.7 240.8 6 AX538208 AX560098 AX5600098 AX5600098 AX5600098 AX5600098 AX5600098 AX5600098 AX5600098 AX5600098 AX5600098 AX		7 0	č				BC029645	Mus
34 242.4 7.8 249.9 HSA219876 AJ319876 35 240.8 7.8 2472 6 AX207905 AX207905 36 240.8 7.8 2672 6 AX207905 AX207905 38 239.2 7.7 240.9 6 AX38208 AX36009 40 239.2 7.7 240.9 6 AX38206 AX38206 AX38206 41 238 7.7 240079 2 AX2162364 AC128364 AC128367 AC12827 AC18227 AC1827 AC			7			jσ	AV055384	Ношо
35 240.8 7.8 272 6 AX207905 AX207905 37 240.8 7.8 310.4 6 AX207903 AX5207903 38 239.2 7.7 132.7 6 AX530208 AX530208 AX530208 40 239.2 7.7 240.9 6 AX560098 AX530208 AX55702 AX55702		ى 4 ا	V (10	HSA319876	
36 240.8 7.8 20.7 5 AX207903 AX207903 36 240.8 7.8 310.4 6 AX238208 AX338208 39 239.2 7.7 240.9 6 AX358209 AX360098 AX360098 41 238 7.7 240079 2 AC128364 AX538206 AX538206 AX538206 41 238 7.7 240079 2 AC128364 AX538206		J.	77			١ ٧	100 TO CAK	Seque
37 240.8 7.8 5104 6.858208 AX538208 39 239.2 7.7 2409 6.8458208 AX538098 AX56098 40 239.2 7.7 2409 6.8458206 AX588206 AX		36	77 (o 4	2007003	m
38 239.2 7.7 2409 6 AX360098 239.2 7.7 2409 6 AX360098 6 AX360098 40 239.2 7.7 240079 2 AC128364 AX538206 AC128364 AC1283766 2 AC128776 2 AC136775702 AC136778 AC1367		3.7	7				, 0	20
39 239.2 7.7 240.9 6 AX538206 4 AX538206 41 238 7.7 240.079 2 AC128364 AC12826736 2 AC1282736 2 AC1282736 2 AC1282736 2 AC1282736 2 AC1282736 AC1282		9	N (o 4	0 0	86
40 239.2 7.7 5.49.50 A.50.20.20.4 AC128364 AC128364 AP001183 AP001183 AP001183 AP001183 AC012672 AC012		39	7				, ,	320
41 238 7.7 240079 2 ACLESS44 APO01163 42 212.2 6.8 174526 2 AC021672 AC021672 44 212.2 6.8 190314 9 AC011927 AC019227 45 212.2 6.8 190314 9 AC019227 AX375702		40	2			0 0	200	3364
42 212.2 6.8 174256 9 AP001183 AC021672 43 212.2 6.8 182736 2 AC019227 AC019227 44 212.2 6.8 190314 9 AC019227 AX375702		41		7.		7 (2000	1183
43 212.2 6.8 182736 2 AC021672 AC012277 44 212.2 6.8 190314 9 AC019227 AC019227 AC019227 AX375702		42	Ċί	9		v.	AP001183	OmoH 6731
212.2 6.8 190314 9 AC01922/			N	ė.		2	167	ACC HOMO
0 70/0 PM COURTON CONTRACT 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			7	9		9	322	ALTON COLL
5 206 6.6 734 6 AX3/5/02			, ,	,			770	70/04 00

ALIGNMENTS

PAT 18-MAY-2002	Euteleostomi; ; Murinae; Mus.	m
linear	Vertebrata; thi; Muridae;	le disruption
AX395268 3106 bp DNA Seguence 5 from Patent W00203787. AX395268 AX395268.1 GI:21066293	Mus musculus Mus musculus Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.	1 Allen,K.D. and Leviten,M.W. Transgenic mice containing targeted gene disruptions Patent: WO 0203787-A 5 17-JAN-2002;
RESULT 1 AX395268 LOCUS DEFINITION ACCESSION VERSION	KEYWORDS SOURCE ORGANISM	REFERENCE AUTHORS TITLE JOURNAL

us-09-900-751-1.rge

```
AAAACTGTGACTGTGGGCTGCGATCCTTTACCAAACAGGCTCGCGGGTTGGTGGCACGA 1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTGTGGGGCCTCGCTCATCTCTCTGACTGGCTGGTCTCTGCAGCTCATTGCTTTCAGG
                                                                                                                                                                                                                                                                                                                                                                  TCCTAGCTGAGTACCTCTCCTAGGACTCCAACGACCCGTGCCCAGGGATGTTCATGTGCA
                                                                                                                                                                                                                                                                                                                                                                                                         TCTGGAAGCCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGTGGGGACGGAAGTGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1141 ACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAACAACAACGGAACGTGAAGG
                                                                                                                                                                                                                               ACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGAGGTCCCCAGTTTGTGGTGAGGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATAGTGATGAGGGTTACTGCGGATGCGATGCCACCCACCAGTTCACGTGCAAAAACCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGAGGCTGCAGCTGTCCTGCTGGAGAGTTTCAAGTGTTCCAATGGGAAGTGTTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1741 ACAGCGIGAATGICGICTCTIGCACCAAAATATACCTACCGCIGCCAAAATGGCCTCTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGAGCAAGGCCAACCCTGAGTGTGATGGGAAGACGGACTGTAGCGATGGCTCCGATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGCGGACGAGGGCGAGTGGCCTGGCAGGTGAGCCTCCACGCCCTGGGCCAAGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Areceaseaseaseaseasecerisecaseaseasecriceaseceriseseceaseseceaer
                 CCTACAACCTGACTTTCCTCTCCTCCCAGAACGTCTTCCTTGTCACGCTGATAACCAATA
                                                                                     CTGACCGGCGACATCCTGGCTTTTGAGGCCACTTTCTTCCAGCTGCCCAAGATGAGGCAGCT
                                                                                                1021 CTGACCGGCGACATCCTGGCTTTGAGGCCACTTCTTCCAGCTGCCCAAGATGAGCAGCT
                                                                                                                               GTGGCGCCTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCCTACTATCCAGGCCACT
                                                                                                                                             1081 GTGGCGGCTTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCCTACTATCCAGGCCCT
                                                                                                                                                                          1141 ACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAACAACGGAACGTGAAGG
                                                                                                                                                                                                                   TGCGCTTCAAACTCTTCTATCTGGTGGACCCCAACGTACCAGTGGGCTCCTGCACCAAGG
                                                                                                                                                                                                                                                               ACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGAGGTCCCAGTTTGTGGTGAGCA
                                                                                                                                                                                                                                                                                                         GCAACAGCAGCAAGATTACAGTCCACTTCCATTCTGATCACTCGTACACGGACACCGGGT
                                                                                                                                                                                                                                                                                                                        GCAACAGCAGCAAGTTACAGTCCACTTCCATTCTGATCACTCGTACACAGGACACGGGT
                                                                                                                                                                                                                                                                                                                                                     TCCTAGCTGAGTACCTCTCCTACGACTCCAACGACCCGTGCCCAGGGATGTTCATGTGCA
                                                                                                                                                                                                                                                                                                                                                                                             AGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGGGCAGACTGCCCGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                         <u> AGGAGGGCTGCAGCTGTCCTGCTGGGAGTTTCAAGTGTTCCAATGGGAAGTGTCTCCCTC</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          <u> AGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGATGGGTCTGACGAGGCTTCATGTG</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCIACAACCIGACITICCICCICCCAGAACGICTICCITGICACGCIGAIAACCAAIA
                                                                                                                                                                                                                                                                                                                                                                                                                                          1501
                                                                                                                                                                                                                                           1201
                                                                                                                                                                                                                                                                                      1261
                                                                                                                                                                                                                                                                                                                               1321
                                                                                                                                                                                                                                                                                                                                                                                                1441
                                                                                                                                                                                                                                                                                                                                                                                                                    1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1981
                                                                                                                                1081
                                                                                                                                                                                                                     1201
                                                                                                                                                                                                                                                                 1261
                                                                                                                                                                                                                                                                                                           1321
                                                                                                                                                                                                                                                                                                                                                     1381
                                                                                                                                                                                                                                                                                                                                                                           1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1801
                                                                                      1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                            q
                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                     6 B 6
                                                                                                                                                                                                                                                                                                                                                                                                                                          ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ₹
                                           à
                                                              g
                                                                                     ò
                                                                                                      g
                                                                                                                                à
                                                                                                                                               g
                                                                                                                                                                    8
                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                               ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                     120
                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTCGCCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTACTACTGGTCAGAGTTCA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          999
                                                                                                                                                                                                          120
                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAACAGCTGCAGTTTTGCCCTGCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGCGAACAATGCCAAGAAAGTGGAGAAAGCGAGGCCCCAAGGCGCTGGGTGGTGGTGGTGGTGG
                                                                                                                                                                                                                                                                                                                                   ATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTGAGGATCACAAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                          AGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTACTACTGGTCAGAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCATCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCCATGGCTGGGAGCGAGTTGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATTGCCACCCCGAGCACGGCCACTGAAATCCTTCGTGCTAACATCTGTGGTGGCCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATTGCCACCCCGAGGACGGGGCACTGAAATCCTTCGTGCTAACATCTGTGGTGGCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCATTGACCCCAGAATGCTGCAGAGACTCAGGACAACAGCTGCAGTTTTGCCCTGCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCTTCCCCAACAGTCCCTACCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cecareccecreccaereserecrecesesesesesesesesererererereasecreaecr
                                                                                                                                                             CATGGTAGACGGCTGCCCGGAGGGACCACGCGTCTGAGACCGGCGATCGGACCGCCAAAA
                                                                                                                                                                                                                                                                                                                      CAGTGCTGCTCAGCTTCCTCTTCCTCCTCATGGCTGGCTTGCTGGTGTGCCACTTCC
                                                                                                                                                                                                                                                                                                                                                                 ATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTGAGGATCACAAATGAGA
                                                                                                                                                                                                                                                                             CTGCGAACAATGCCAAGAAAGTGGAGAAGCGAGGCCCCAGGCGCTGGGTGGTGCTGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAAGGAGGCGCTGATGCTGTACAATGAAGTCCCTGGGTCCCTAGGTCCAAGA
                                                                                                                                            CATGGTAGACGGCTGCCCGGAGGGACCACGCGTCTGAGACCGGCGATCGGACCGCCAAAA
                                                                                                                                                                                                                                  TCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTTGAGGAGGGTGTGGAGTTCCTGC
                                                                                                                       ó
                                                                                                Length 3106;
                                                                                                 . 9
                                                                                                                       0;
                                                                                                 DB
                                                                  u
                                                                                             100.0%; Score 3106;
llarity 100.0%; Pred. No. 0;
Conservative 0; Mismatches
Query Match
Best Local Similarity
Matches 3106; Conser
                                                                  692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                      61
                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                 BASE COUNT
ORIGIN
             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               dd
Qy
Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              $ 9 8 9 A
                                                                                                                                                             d
                                                                                                                                                                                                      ΩD
                                                                                                                                                                                                                        දු පු
                                                                                                                                                                                                                                                                     D
                                                                                                                                                                                                                                                                                                                                                                                                    ₹
                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           장염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A
A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   원
장
                                                                                                                                                                               \delta
```

1380

1380

1320

1320

1140

1020

1200

1440

1560 1620 1680

3061 TTGAGAGTAAAACATTTTTTTTTTTTTTAAAAAAAAAAA	AF042822 Mus musculus AF042822 AF042822.3 G	Mus musculus (house mouse) Mus musculus Eukaryota; Metazoa; Chordata; Crani Mammalia; Eutheria; Rodentia; Sciur 1 (bases 1 to 3106) Kim,M.G., Chen,C., Lyu,M.S., Cho,E. Schwartz,R.H. Cloning and chromosomal mapping of	stromal cells encoding a new mouse type II memorane serine protease, epithin, containing four LDL receptor modules and two CUB domains Immunogenetics 49 (5), 420-428 (1999) 99216440 10199918 2 (bases I to 3106) Kim, M.G., Chen, C., Cho, E., Park, D. and Schwartz, R.H.	Direct Submission Submitted (13-JAM-1998) Laboratory of Cellular and Molecular Submitted (13-JAM-1998) Laboratory of Cellular and Molecular Immunology, NIAID, NIH, 9000 Rockville Pike, Bethesda, MD 20892, USA 3 (bases 1 to 3106) Kim,M.G., Chen,C., Cho,E., Park,D. and Schwartz,R.H. Direct Submission Submitted (16-NOV-1999) Laboratory of Cellular and Molecular	unology, NIAID, NIH, 9000 Rockville Pike, Be Lence update by submitter (bases 1 to 3106) "M.G., Chen.C., Cho.E., Park,D. and Schwart; set Submission of Callular intteed (27-MAR-2000) Laboratory of Cellular inology, NIAID, NIH, 9000 Rockville Pike, Be	USA USA USA USA USA ON Mar 27, 2000 this sequence version replaced gi:6435480. Location/Qualifiers 1. 3106 / Organism="Mus musculus" / mol_type="mRNA" / strain="C.B.17scid" / Abtronescentes 10990"	/cll_ucosoure="stronal" /cll_type="thymus" /tissue_type="thymus" /noce="severe combined immunodeficient (SCID)" 632630 /function="serine procease" /codon_tern=1 /product="sepithin" /protein_id="plithin"	ACTOR TATER—"ALI 1733083 WAS TAKER—"ALI 1733083 WAS TAKER—"ALI 1733083 WAS TAKER—"ALI 1733083 WAS TAKER—"ALI 1733083 WAS TO THE TOTAL TO THE TOTAL THE
E da	RESULT 2 AF042822 LOCUS DEFINITION ACCESSION VERSION KEYWORDS	SOURCE ORGANISM REFERENCE AUTHORS TITLE	JOURNAL MEDLINE PUBMED REFERENCE AUTHORS	TITLE JOURNAL AUTHORS TITLE JOURNAL	REMARK REFERENCE AUTHORS TITLE JOURNAL	REMARK COMMENT FEATURES SOURC	SQD	
1981 TGTGTGGGGCCTCGCTCATCTCTCTGACTGGTCTCTCTGCAGCTCATTGCTTTCAGG 2040	2041 AIGACAAAAATITCAAGIACTACAGACTACAGCAIGIGGACGGCCTTCCTGGGTCTGGG 2100	2161 ACCCTTCCTTCATGATTTCACCTTCGACTATGACATGGCCTTGCTGGAGCTGGAGAAGT 2220	CTGCTGGCAAGGCCATCTGGGTCACAGGGGGCACACAAAAGAGGGGGGGG	2401 TGCCGCAGCACATCACCCCACGAATGATGTGTGTGGGTTTCCTCAGTGGGGTGTGACT 2460 2401 TGCCGCAGCAGATCACCCCACGAATGATGTGTGTGGGGTTTCCTCAGTGGGGGTGTGGACT 2460 2401 TGCCGCAGCAGATGATGATGTGTGTGGGGGTTTCCTCAGTGGGGGGTGTGAGACT 2460 2461 CCTGCCAGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGAAAAAAATGGGCGAATGTTCC 2520 2461 CCTGCCAGGGTGACTCTTGGTGACCCCTTGTCAAGCGCGGAAAAAAATGCGCGCAATGTTCC 2520	2521 AGGCTGGTGGTGAGCTGAAGGCTGCGCTCAGAGGAACAACCCAGGCGTGTACA 2580	2641 AGACAGCCGACCACACACACGGGATGCCCGACATGCACACGGATACAGGAGAG 2700 [THECETCAGGGCCAGCCTGGGGGAAGGGTTTGATGGCCCCTCTAGGCGGGGACCCCCTCTAGGCTTTGAGGGAACCCCCTCTAGGCGCCCCTCTAGGCGCAGGAACCCCCTCTAGGCGAGGAACCCCCTCTAGGCGCAGGCTTTGATGGCGGCCTCCCCCTCTAGCCCCCTCTAGCCCCTCTAGCCCCCTCTAGCCCCTCTAGCCCCTCTAGCCCCTCTAGCCCTCCTAGCCCTCCTAGCCTCCCCCTCTAGCCTCCCCCCTCTAGCCTCCCCCCTCTAGCCTCCCCCCTCTAGCCTCCCCCCCC	2841 GGGGGCGGAAGAGGCCCCGGAGGCCCCTTCTATGAGCTCCC 2940 2941 GGGGCCCTATGGGGGGCCCCGGAGGCTCCTTTCAGGAGGCCCCATGAGCTCCC 2940 2941 GGGGCCCTATGGGGGGGCCTCAGGCTCACTTTTCAGGAGGCCCAGCCCTAGGA 3000 2941 GGGGGCCTATGGGGGGGGGCTCAGGGTCCTTTTCAGGAGGCCCAGCCCTAGGA 3000 3001 ACCCCAGAAAAGAGGGGGCTCAGGGTTTTTGCTTTTGCTGTTTGCCGGGGGGGG

BASE COUNT	KRSASGVQELKLKRIITHPSFNDFTFDYDIALLELEKSVEYSTVVRPICLPDATHVFP AGKAIWYTGWGHTKEGGTGALILQKGEIRVINQTTCEDLMPQQITPRMCVGFLSGGV DSCQGDSGGPLSSAEKDGRMFQAGVVSWGEGCAQRNKPGVYTRLPVVRDWIKEHTGV" [692 a 862 c 897 g 655 t	λ	CCTACAACCTGACTTTCCTCCTCCCAGAACGT
Query Ma Best Loc Matches	Query Match 100.0%; Score 3106; DB 10; Length 3106; Best Local Similarity 100.0%; Pred. No. 0; Matches 3106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	λ [.] .α.	21 CTGACCGGCGACATCCTGGCTTTGAGGCC
Qy Dp	1 CATGGTAGACGGCTGCCCGGAGGGACCACGCGTCTGAGACCGGCGATCGGACCGCCGAAA 60	රු සි 	GTGGCGGCTTTTGAGTGACCCAAGGGACCAAGGGACGACGACGACGACGACGACGGGCATTTTGAGTGACACCCAAGGGACACCCAAGGGACACGAAGGACACGAAGGGACGAAGGAAGAA
λ QC QC	61 CCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGCTCTCAGGACTTCGGCGCGGGAC 120	ර් සි	4 4 1 1
9 9 9	121 TCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAGGGTGTGGGGTTCCTGC 180 	& A	1201 TGCGCTTCAAACTCTTCTATCTGGTGGACCCCAACGT.
oy Db	24	\$ g	1261 ACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGACTACTGCGGTGACTACTGTGGAGATCAACGGGGAGAAGTACTGCGGTGA
Qy	30	<i>ك</i> ة و	1321 GCAACAGCAGCAGATTACAGTCCACTTCCATTCTGA
Sy Bb	AGTCTTCAATGGCCATCTGAGGATCACAAATGAGA 36	<i>장</i> 쥠	1381 TCCTAGCTGAGTACCTCTCCTACGACTCCAACGACCCC 1381 TCCTAGCTGAGTACCTCTCCTACGACTCCAACGACCCC
QY	CCACCTCCACAGAGTTTATCAGCCTGGCCAGCCAGG 42 	ζζ QD	1441 AGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGA(ACTGCGCTGCG
\ \frac{1}{2}	4 4 8 8	v da	1501 ATAGTGATGAGGGTTACTGCCGATGCAATGCCACCCA(
oy Dp	5 4	VQ dd	1561 TCTGCAAGCCCTCTTCTGGGTCTGTGACAGTGTCAA(
λ Β	GCATCCCCCACACCTGGCAGAAGAGTTGATCGCGCCATGGCTGTGGAGCGAGTTGTAA 60	V.V.	1621 AGGAGGCTGCAGCTGTCCTGCTGGAGATTTCAAGTG.
Sp Sp	9 9	& ag	1681 AGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGA
Qy Dp	CCATTGACCCCAGAATGCTGCAGAGCTCAGGACAACAGCTGCAGTTTTGCCCTGCATG 72	VQ da	1741 ACAGCGTGAATGTCGTCTTTGCACCAAATATACCTA(
λό gg	FACCCGG 78	Q Q	1801 TGAGCAAGGGCAACCCTGAGTGTGATGGGAAGACGGA(1801 TGAGCAAGGGCAACCCTGAGTGTGATGGGAAGACGGA
oy Db	TGCGGGGGGACTCTGTGCTGAGCTCACCT	QV Db	1861 AAAACTGTGACTGTGGGCTGCGATCCTTTACCAAACACACAC
PG 95	TCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCATGACCTGGTCACCTGTTAG 90 TCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGGAACTGGTCACCGGTGATG 90	δδ ·	1921 ATGCGGACGAGGGGGAGTGGCCCTGGCAGGTGAGCCT(
qá Xō	T 96 - T 96		1981 IGTGGGGCCTCGGTCATCTCCTGACTGGCTGGTCTCTCTGACTGGCTCGTCTCTCCTCGTCTCTCCTCTCTCT

1080 1140 1140 1380 CCTGCCCAGGGATCTTCATGTGCA 1440 ACCAGTTCACGTGCAAAAACCAGT 1560 TGCCCAACACCGGAACGTGAAGG 1200 AGAGGTCCCAGTTTGTGGTGAGCA 1320 1500 ACGACTGTGGGGACGGAAGTGACG 1620 GTTCCAATGGGAAGTGTCTCCTC 1680 ATGGGTCTGACGAGGCTTCATGTG 1740 ACTGTAGCGATGGCTCCGATGAGA 1860 1920 1920 1980 TCTCTGCAGCTCATTGCTTTCAGG 2040 TCCTTGTCACGCTGATAACCAATA 1020 TGCCCAACACCGGAACGTGAAGG 1200 STACCAGTGGGCTCCTGCACCAAGG 1260 ACGGCTGGGCAGACTGCCCGGATT 1500 ATGGGTCTGACGAGGCTTCATGTG 1740 ACCGCTGCCAAAATGGCCTCTGTC 1800 TCCACGCCCTGGGCCAGGGCCACT 1980 TCCAGCTGCCCAAGATGAGCAGCT TCCAGCTGCCCAAGATGAGCAGCT GCAGCCCCTACTATCCAGGCCACT GCAGCCCCTACTATCCAGGCCACT ATCACTCGTACACGGACACCGGGT ACGCTGGGCAGACTGCCCGGATT TCCACGCCCTGGGCCAGGGCCACT

93 DP

à a

24 25 26 27

9 Q

Sy Bp QY

ò

00 AU

\$ P \$

90 Ag

us-09-900-751-1.rge

BC005496 Mus musculus suppression of tumorigenicity 14 (colon carcinoma), mRNA (cDNA clone MGC:7395 INAGE:3488059), complete cds. BC005496 BC005496.1 GI:13529565 MGC. Mus musculus (house mouse) Mus musculus (house mouse) Mus musculus (house mouse) In (bases I to 2348) In (bases I to 2348) In (bases I to 2348) Strausberg,R.L., Feingold, E.A., Grouse,L.H., Derge,J.G., Klausner,R.D., Collins,F.S., Wagner,L., Shenmen,C.M., Schuler,G.D.,	Altschul, S.F., Zeeberg, B., Buetow, K.H., Schaefer, C.F., Bhat, N.K., Hopkins, R.F., Jordan, H., Moore, T., Max, S.I., Wang, J., Hsieh, F., Diatchenko, L., Marusina, K., Banner, A.A., Rubin, G.M., Hong, L., Stapleton, M., Soares, M.B., Bonaldo, M.F., Casavant, T.L., Scheetz, T.E., Brownstein, M.J., Usdin, T.B., Toshiyuki, S., Carninci, P., Prange, C.C., Raha, S.S., Loquellano, N.A., Peters, G.J., Abramson, R.D., Mullahy, S.J., Boask, S.A., McEwan, P.J., McKernan, K.J., Malek, J.A., Gunaratne, P.H., Richards, S., Worley, K.C., Hale, S., Garcia, A.M., Gay, L.J., Hulyk, S.W., Villalon, D.K., Muzny, D.M., Sodergren, E.J., Lux, K. Gibbs, R.A., Fahey, J., Helton, E., Ketteman, M., Madan, A., Rodrigues, S., Sanchez, A., Whiting, M., Madan, A., Young, A.C., Shevchenko, Y.,	Boutfard, G.G., Blakealey, R.W., Touchman, J.W., Green, E.D., Dickson, M.C., Rodriguez, A.C., Grimwood, J., Schmutz, J., Myers, R.M., Butterfield, Y.S., Krzywinski, M.I., Skalska, U., Smailus, D.E., Schnerch, A., Schein, J.E., Jones, S.J. and Marra, M.A. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences Proc. Natl. Acad. Sci. U.S.A. 99 (26), 16899-16903 (2002) 22386557 2477932 2 (bases 1 to 3248) Stransberg, R.	Submitted (27-MR-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590, USA (MH-MGC Project URL: http://mgc.nci.nih.gov Contact: MGC help desk Bmall: cgapba-rémail.nih.gov Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys CDNA Library Preparation: Life Technologies, Inc. CDNA Library Arrayed by: The 1.M.A.G.E. Consortium (LIML) DNA Sequencing by: Sequencing Group at the Stanford Human Genome Center, Stanford University School of Medicine, Stanford, CA 94305	Web site: http://www-shgc.stanford.edu Contact: (Dickson, Mark) mcd@paxil.stanford.edu Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers, R. M. Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov	Series: IRAK Plate: 7 Row: i Column: 16 This clone was selected for full length sequencing because it passed the following selection criteria: Hexamer frequency ORF analysis. Location/Qualifiers 13248 / organism="Mus musculus" / porganism="Mus musculus" / porganism="Mus musculus" / parafi="CSTBL/GJ" / db xref="taxon:10090" / clone="MGC:7395 IMAGE:3488059" / tissue type="Mammary tumor. WAP-TGF alpha model. 7 months old, gross trissue." / clone lib="NCI CASP_Mam5" / lab_host="DH10B"
RESULT 3 BC005496 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS		TITLE JOURNAL MEDLINE PUBMED REFERENCE AUTHORS	TOURNAL TOURNAL COMMENT		FEATURES
2041 ATGACAAAATTTCAAGTACTCAGACTACGATGTGGACGGCCTTCCTGGGTCTGCTGG 2100 2041 ATGACAAAAATTTCAAGTACTCAGACTACACGATGTGGACGCCTTCCTGGGTCTGCTGG 2100 2101 ACCAGAGCAAGCGCAGTGCCTCTGGGGTGCAGGCTTCCTGGGTCTGCTGG 2100 2101 ACCAGAGCAAGCGCAGTGCCTCTGGGGTGCAGAGCTCAAACGTATCATCACCC 2160 2101 ACCAGAGCAAGCGCAGTGCCTCTGGGGTGCAGGAGCTCAAACGTATCATCACCC 2160 2101 ACCAGAGCAAGCGCAGTGCCTCTGGGGTGCAGGAGCTCCAAACGTATCATCACCC 2160 2161 ACCCTTCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTGCTGGAGGCTGGAGAAGT 2220 2161 ACCCTTCCTTCAATGATTTCACCTTCGACTATGACATCGCTTGCTGGAGACTTCC 2280 2121 CGGTGGAGTACAGCACGTCGTGGTGGCCCCATCTTGCCTGCTGCTGCTGCTGCTCCATCTTTC 2280 2221 CGGTGGAGTACAGCACCGTCGTGGCGCCCCATCTTCCCTGATGCTTCCCATGTTTCC 2280 2221 CGGTGGAGTACAGCCCTGCTGCTGCTGCCTGCTGCTGCTCCCATGTTTCC 2280		2461 CCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGAGAAGGTGGGCGAATGTTCC 2520 2461 CCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGAGAAAGATGGGCGAATGTTCC 2520 2461 CCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGAGAAAGATGGTTCC 2520 2521 AGGCTGGTGGGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAACAAGCCAGGCGTGTACA 2580 2521 AGGCTGGTGGTGGTGGGGTGAAGGCTGCGCTCAGAGGAACAAGCCAGGCGTGTACA 2580 2581 CAAGGCTCCTGTAGTTCGGGACTGGATCAAAGAGCACCATGGGGTATAGCAGCATGGAC 2581 CAAGGCTCCCTGTAGTTCGGGACTGGATCAAAAGAGCACAACAGCTAACAATAAACAACAACAACAACAACAACAACAACAACA	641 AGACAGCCGACCACAAACACCCACAGGGATGCCCGACATGCACACCTGGATACAGGAGG [641 AGACAGCCGACCACAAACACCCACAGGGATGCCCGACATGCACACCTGGATACAGGAGG [642 AGACAGCCGACCACACACACCCCCCCCCCCACACCTGGATACAGAGGAGG [643 AGACACAGACATTATGCTGTGGCCTCCCCCCCCCAACACAACACAAACTGGAACT [644 AGACACTGAGGATTATGCTGTGGCCTCCCCCCCCCAACACACAC		2941 GGGAGCCTAGAGAGAGAGACTCCCGAGAGACTGCTCCAACTGTGAGCTCCC 2940 2941 GGGAGCCTATGGAGAGAGAGAGCTCAGAGACACACCCTAGCA 3000 2941 GGGAGCCCTATGGAGAGAGAGAGCTCAGGATCTTTCAGGAAGCGCCAGCCCTAGGA 3000 3001 ACCCCAGAAAAGAGAGAGAGAGAGCTCAAGGTCATTTCACGAAGCGCCCAGCCCTAGA 3000 3001 ACCCCAGAAAAGAGTGGTACCTAAGACTGAAATTGTTTTGTTGTTTGCTGTTGCCAGGGGTGGGT

```
1010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1790
                                                                                                                                                                                                                                                                                                                                                                                                                                      096
        710
                                                                                                                                                                                                   780
                                                                                                                                                                                                                                        890
                                                                                                                                                                                                                                                                                                                   950
                                                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                        CCCATGGTGCAGCAGTGACACGCTTCACTACCCTGGCTTCCCCAACAGTCCCTACCCGG
                                                                                                                                                                                                                                                                                                                                                                                   TCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGTGACCTGGTCACCCGTGTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAACAGCAAGATTACAGTCCACTTCCATTCTGATCACTCGTACACGGACACGGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGGAGGCTGCAGCTGTCCTGCTGCGAGTTTCAAGTGTTCCAATGGGAAGTGTCTCCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1731 AGGAGGCTGCTGCTGCTGCGAGTTTCAAGTGTTCCAATGGGAAGTGTCTCCCTC
      GCATCCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCATGGCTGTGGAGCGAGTTGTAA
                                            CATTGCCACCCCGAGCACGGGCACTGAAATCCTTCGTGCTAACATCTGTGGTGGCCTTCC
                                                                               CATTGCCACCCGAGCACGGGCACTGAAATCCTTCGTGCTAACATCTGTGGTGGCCTTCC
                                                                                                                      CCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGCAGTTTTGCCCTGCATG
                                                                                                                                                        ccarreaccccagaardcrecagaggacrecagacaacaacagcrecagrirrigcccrecare
                                                                                                                                                                                                 CCCATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCTTCCCCAACAGTCCCTACCGG
                                                                                                                                                                                                                                                                               CGCATGCCCGCTGCCAGTGGGTCCTGCGGGGGACGCCGACTCTGTGCTGAGCCTCACCT
                                                                                                                                                                                                                                                                                                     CGCATGCCCGCTGCCAGTGGGTCCTGCGGGGGGACGCCGACTCTGTGCTGAGCCTCACCT
                                                                                                                                                                                                                                                                                                                                                        TCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGTGACCTGGTCACCGTGTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ccracaaccreactrrccrccrccagaacercrrcrrercacecrearaaccaara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGACCGGCGACATCCTGGCTTTGAGGCCACTTTCTTCCAGCTGCCCCAAGATGAGCCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGGCGCCTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCCTACTATCAGGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAACAACAACGGAACGTGAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAACAACCGGAACGTGAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCGCTTCAAACTCTTCTATCTGGTGGACCCCAACGTACCAGTGGGCTCCTGCACCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTATIGTGGAGATCAACGGGAGAAGTACTGCGGTGAGAGGTCCCAGTTTGTGGTGAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGGGCAGACTGCCCCGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATAGTGATGAGCGTTACTGCCGATGCCATGCCACCCAGTTCACGTGCAAAAACCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTGCAAGCCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGTGGGGGACGGAAGTGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rendeaagececererrendgerengigaeagaerengaeaacigigggaegaagigaeg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1011 ATAGCCTGAGCCCCATGGAACCCCCACGCTGTGGTGCGGCGGCTGTGTGCGCACCTTCTCACCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTACAACCTGACTTTCCTCCTCCCAGAACGTCTTCCTTGTCACGCTGATAACCAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGACCGGCGACATCCTGGCTTTGAGGCCACTTTCTTCCAGCTGCCCAAGATGAGCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGGCGGCTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCCTACTATCCAGGCCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rdescrircaaacrerrerarerssaceeeceaacsraceassesseseereerseeaee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTATGTGGAGATCAACGGGGAGAGTACTGCGGTGAGAGGTCCCCAGTTTGTGGTGAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCAACAGCAGCAAGATTACAGTCCACTTCCATTCTGATCACTCGTACACGGACACGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCTAGCTGAGTACCTCTCCTACGACTCCAACGACCCGTGCCCAGGGATGTTCATGTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rectadericadericatectaceaetecadeceeteceaecaaeteceaecaaetecaaeteca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGACTIGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGGGCAGACTGCCCGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1621
                                                                               711
                                                                                                                                                                                                                                                                                                                                                                                             951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1441
      651
                                          601
                                                                                                                      661
                                                                                                                                                          771
                                                                                                                                                                                                 721
                                                                                                                                                                                                                                      831
                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1261
                                                                                                                                                                                                                                                                                                                 891
                                                                             g
                                                                                                                                                  q
                                                                                                                                                                                               ð
                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       du
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                          à
                                                                                                                  ð.
                                                                                                                                                                                                                                                                KVERKGPRRWVUVAULESTLLSLAGGLUWHEHYRNVRVOKVENGHLRITREI ELFANNA
KKVERKGPRRWVUVAULESTLLSLAGGLUWHEHYRNVRVOKVENGHLRITREI EL
DAYENSTSTEFISLASOVKEALKLLSLAGGLUWHEHYRNVRVOKVENGHLRITREI EL
DAYENSTSTEFISLASOVKEALKLLSNEVPLGPYRKSAVTAFSBGSVIAYYWSEFS
I PPHILAABVORAWTREVTIAPRAPALKESTTISVAPRIDIPRAPEDDENGORGERAL
HAGGAAVTRETTPGFPRISYPZHARCGWILKGDADSYLSLTFRSEDVAPCDEHGSDLV
TVYDSLSPWEPHAVVRLGGFPSPYTSGHYPDINOTWNIKYRPRENVKYRFFLFYLVDPNV
PKNSSCOGFISJOTSEPYTSGHYPDINOTWNIKYRPRINVKYRFFLFYLVDPNV
PKNSSCOGFISJOTSEPYTSGHYPDINOTWNIKYRPRINVKYRFFLFYLVDPNV
PKNSSCOGFISJOTSEPYTSGHYPDINOTWNIKYRPRINVKYRFFLFYLVDPNV
PKNSSCOGFISJOTSEPYTSGHYPDINOTWNIKYRPRINVKYRFFLFYLVDPNV
PKNSSCOGFISJOTSEPYTSGHYPDINOTWNIKYRPRINVKYRFFLFYLVDPNV
PKNSSCOGFISJOTSERFKONGNADOPDYSDERKYCRONATHOFTCKNOPCKPLFWVC
DSYNDCGJOSSGEGCSCOFASSFKOSNGSKILDOSDEKNCKOGGLRSFTKQSNYVVS
CTKYTYRCONGLCLSKGNPENOPDYSDERKYCDCGLRSFTKQSDYNWYRSDYNWYRS
CTKYTYRCONGLCLSKGNPENOPTSDYLALLELEKSVEYSTVWRPICLDDATHVFP
AGKALWVGWGHTKTKGGTGALII DKNSTAHFFDYDIALLELEKSVEYSTVWRPICLDDATHVFP
AGKALWVGWGHTKTKGGTGALII DKNSTRYNINOTYCBELKSOFY
DSCCGGDSGGPLSSAEKDGRNFCQAGVNSWGEGCAQRRNKFGVYTRLLPVVRDWIKKEHTGV"
918 c

928 G

668 L
                                                                                                                                                                                           /protein id="AAH05496.1"
| Mo_xref="G1:135956"
| db_xref="LocusID:1914"
| db_xref="LocusID:1914"
| translation="MGSNRGRXAGGGSQDFGAGLKYNSRLENMNGFEEGVEFLPANNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCATGGGTAGCAATCGGGGCCGCAAGCCGGAGGGGGCTCTCAGGACTTCGGCGCGGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGCGAACAATGCCAAGAAGTGGAGAGAGGCCCCAGGCGCTGGGTGGTGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTATCGGAATGTGCGGGTTCAAAAGTCTTCAATGGCCATCTGAGGATCACAAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTTGGGTCCCTACAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCATCCCCCCCACCACAGAAGAGGTTGATCGCGCCATGGCTGTGGAGCGAGTTGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATGGTAGACGGCTGCCCGGAGGGACCACGCGTCTGAGACCGGCGATCGGACCGCCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGCTCTCAGGACTTCGGGCGCGGGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGCGAACAATGCCAAGAAAGTGGAGAAGCGAGGCCCCAGGCGCTGGGTGGTGGTGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTATCGGAATGTGCGGGTTCAAAAGTCTTCAATGGCCATCTGAGGATCACAAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTTTATCAGCCTGGCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTGGGTCCCTACCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTACTACTGGTCAGAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATGGTAGACGGCTGCCCGGAGGGACCACGCGTCTGAGACCGGCGATCGGACCGCCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAGGGTGTGGAGTTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cagracratricadernocircinaderenocircandaderedeniscindendiaderenoci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                          (colon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 3248;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                          14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2; Indels
                                                                                                                                                          tumorigenicity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 3102.8;
Pred. No. 0;
0; Mismatches
PCMV-SPORT6"
                                                                                                              173. ...2740
/codon_start=1
/product="suppression of
                                                         note="synonym: Epithin"
db_xref="LocusID:19143"
db_xref="MGI:1338881"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
0
    note="Vector:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 99.9%;
Matches 3104; Conservative
                                                                                                                                                                           carcinoma)"
                        .3248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BASE COUNT
ORIGIN
                        gene
                                                                                                                    CDS
```

à 임 $\overset{>}{\circ}$ g ò Db Š q à g õ qq ò qq ò q ð g 8

Oy 2761 GCATCCTTAGGACTCAGAGTTCTTTTTTTTTTTTTTTTT	RESULT 4 AB049189 LOCUS DEFINITION Rattus norvegicus mRNA for ACCESSION AB049189. REYWORDS SOURCE Rattus norvegicus (Norway r ORGANISM Rattus norvegicus (Norway r ORGANISM Rattus norvegicus (Norway r Rattus norvegicus (Norway r ORGANISM Rattus norvegicus (Norway r ORGANISM Rattus norvegicus (Norway r REFERENCE I (Bites) AUTHORS Inoue, H., Takahashi, K. and TITLE membrane-bound arginine specification of the Database REFERENCE I (Bites) AUTHORS Inoue, H., Takahashi, K. and TITLE Dublished Only in Database REFERENCE I (Bases 1 to 3174) AUTHORS Inoue, H., Takahashi, K. and TITLE Direct Submission Journal and Life Science, School of Hadahabilishi and Life Science, School of Hadiblishi, Farishi, Tokyo 192-033	FEATURES Location/Quilifier 1. 3174 Nol_type="making" Mol_type="making" / strain="Wistar" / db_xref="taxon:10" / sex="male" / tissue_type="duod / dev_gage="1" week L27 2694 / codon_start=1 / codon_start=1 / product="membrane / product="membrane / product="membrane / product="membrane / protein id="making / translation="making / translation="making
1681 AGAGCCAGAAGTGTAATGGGAAGCACACTGTGGAGGTGGGTCTGACGAGGCTTCATGTG 1740	ATGACAAAATT ATGACAAAAATT ACCAGAGCAAG ACCAGAGCAAG ACCTTCCTTC ACCCTTCCTTC ACCCTTCCTTC ACCCTTCCTT	2401 TGCCGCAGCAGTCACCCCACGATGATGTGTGGGTTTCCTCAGTGGGGTGTGACT 2460 2511 TGCCGCAGCAGTCACCCCACGATGATGTGTGGGTTTCCTCAGTGGGGTGTGACT 2500 2461 CCTGCCAGGAGATCACCCCACGAATGATGTGTGGGTTTCCTCAGTGGGGGTGTGGACT 2570 2461 CCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAGGGGGAAAAGATGGGGGAATGTTCC 2530 2571 CCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAGGGGGAAAAGATGGGGGAATGTTCC 2530 2521 AGGCTGGTGGGTGAGCTGGGGTGAAGGCTGCAGGGGAAAAGATGGGGGAATGTTCC 2530 2631 AGGCTGGTGGGTGAGCTGGGGTGAAGGCTCCAAAGAACAAGCCAGGGGTGTACA 2690 2581 CAAGGCTCCCTGTAGTTCGGGGTGAAGGCTGCACAGGGGTGAAAGAGCAAGGGAACAAGCAGGGTGAAAGAGCAAAGAGCAAAAGAGCAAAAGAGCAAAAGAGCAAAAGAGCAAAAGAGCAAAAGAGCAAAAGAGCAAAAGAGCAAAAGAGCAAAACACCCAAAAGAGCAATAGCAAAACACCGAAAAGAGCAAAACACCCAAAAGAGAAACACCCAAAACAAAGAGAAACACCCAAAACAAACACCCAAAACAAAAGAGAAACACCCAAAACAAAAAA
8 6 8 6 8 6 8 6 8 6 8 6		8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8

MGNUSEKAGGGSQDFGAGLKYNSRLENMNGFEEGVEFLPVNNA
NAAVVEREFLLSLMAGLLWHFHYRNYRIOKVFNGHLBITNBRFL
ASQWERAMYSEPSTAMYSEVPULGPYKKSTVTAFSEGSVIAYYNSEPS
VERVYTLPPRAAALKSFVLTSVARFJIDPRALQRTQNNSCSFAL
FPNSFYPAHARCQWULGDDASVLSLTFRSFDVAFODGHDSDLV
VRLCGFFSSEYYPGHYPPNINVTWNIKVPNNRHPGFEATFFQL
GGFFSSEYYPGHYPPNINOTWNIKVPNNRNVKRFKLFYLDDDNI
EKFCGERSQFVVSSNSSKITVHFHSDHSYTDTGFLAEYLSYDSN GGGGCAAGGGTTTGATGGCAGCCTTCCCCCTCTAGCC 2880 TCCAAAGTGGGACCCCCTCAAGAGTTGGAGAGAGAAC 2930 TCCAAAGTGGGACCCCCTCAAGAGTTGGAGAGAGAAC 2820 STCCCGGAGAGCTGCTTCCAACTGTCATTGAGCTCCC 2940 GTCCCGGAGAGCTGCTTCCAACTGTCATTGAGCTCCC 3050 TCAGGGTCACTCTTTTCAGGAAGCGCCAGCCCTAGGA 3110 AGGCTGAAATTGTTTTGCTGTTGCCAGGGGTGGGTAT 3060 ideshi Inoue, Tokyo University of Pharmacy of Life Science; 1432-1 Horinouchi, 392, Japan (E-mail:hinoue@ls.toyaku.ac.jp, 1-426-76-7157) CCAGGGTCACTCTTTCAGGAAGCGCCCAGCCCTAGGA 3000 AGCCTGAAATTGTTTTGCTGTTGCCAGGGGTGGGTAT 3170 174 bp mRNA linear ROD 14-APR-2001 r membrane bound arginine specific serine ata, Craniata, Vertebrata, Euteleostomi, tia, Sciurognathi, Muridae, Murinae; mental ne bound arginine specific serine TTTTAAAAAAAAAAAAAA 3106 d Kishi,K. pecific serine protease e (2000) s norvegicus" d Kishi, K. odenum" eks old" 13765.1" .0116" rat)

2812 AGAGAGAACTTGCGTGCTAGCGGCCCAGCCTG 2880 CCAGAGATCTCTTGTGCTGGTGAGAGATGCGGGGG 2868 TCCCCTCTAGCCCTGAGCTGAGAGATGATGC 2940 T-CCCTCTAACTGATTGAGTAAAGATGATGC 2950 CTAAAGGAAACTATCGTCATTGAGCTCCTGGGGGCCC 2974 TCTTTTCAGGAAGCTCCTGGGGGCCCCTGGGGGCCC 2974 TCTTTTCAGGAAGCTCCAGGGCTCCTGGGGGCCCCAGA 3055 GTCTTTCAGGAAGCTCCAGGGGTATTTGAGAGT 3056 TGTTTTGCTGTTGCCAGGGGTGGTATTTGAGAGT 3057 TGTTTTGCTGTTGCCAGGGGTGGTATTTGAGAGT 3058 TGTTTTGCTGTTGCCAGGGGTGGTATTTGAGAGT 3115 TGTTTTGCTGTTGCCAGGGGTGGTATTTGAGAGT 3116 TGTTTTGCTGTTGCCAGGGGTGGTATTTGAGAGT 3116 AAAAAAAAAAAAA 3174		Ω Ω	/db.xref="taxon:10116" /sex="male" /tissue_type="jejunum" /dev stage="8 weeks old" 1. 2568 1. 2568 /gene="MBSP" 1. 2568 /gene="MBSP" /codon_start=1 /product="membrane bound ser /protein_id="membrane bound ker /protein_id="
B & B & B & B & B & B & B & B & B & B &	RESULT 5 AB037898 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISN TITLE JOURNAL MEDLINE PUBMED REFERENCE	AUTHO TITLE JOURN FEATURE	
1741 ACAGCGTGAATGTCGTCTTGCACCAAATATACCTACCGCTGCCAAAATGGCCTCTGTC	ACCAGAGCAAGCGCAGTGCCT	2465 TGCCGCAGCAGATCACCCCACGAATGATGTGTGGGGTTTCCTCAGTGGGGGTGTGGGACT 2524 2461 CCTGCCAGGGTGACTCGGTGGCCCTTGTCAAGCGCGAAAAGATGGGCGAATGTTCC 2520 2525 CCTGCCAGGGTGATTCCGGTGGCCCCTTGTCCAGTGTGGAGAAAAAAAGATGGCGAATTCTCC 2584 2521 AGGCTGGTGGTGGGTGGGCCCCTTGTCCAGTGTGGAGAAAAAAAA	2641 AGACAGCCGACCACAAACACCCACAGGATGCCCGACATGCACCTGGATTACAGGAGAG 2700 2705 AGACAACCACCATGAACTCGCAAAGGGATGCCCCCCACGCGTACCTGGATACAGCAGAG 2764 2701 GAACACCCGACGATTATGCTGTGGCCTCCCCCCCCAACACACAC
B & B & B & B & B & B & B & B & B & B &			868686

```
---GGGGCAAGGGTTTGATGGCAGCCT 2867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    zuki, Kyoto University, Graduate
Food Science and Biotechnology,
Owake-cho, Kitashirakawa,
pan
                                                                                                                                                                                                                                SCTTTCCTGGAGAACTGCTTCCAGACT 2998
                                                                                                                                 SQDFGAGLKYNSRLENMNGFEEGVEFLPVNNA
                                                        SCTGTCCCGGAGAGCTGCTTCC---- 2922
                                                                                                                  CCTATGGGAGGAGGCTCAGGGTCAC 2973
                                                                                                                                                                           SAAAAGAGTGGTACCTAAGGCTGAAAT 3033
                                                                                                                                                                                                                                                                                                                                                                                              mRNA linear ROD 20-OCT-2001
brane bound serine protease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ata; Vertebrata; Euteleostomi;
ognathi; Muridae; Murinae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cease (MT-SP1) in intestinal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hitomi, Y., Iwanaga, T. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4), 995-1002 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rine protease"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
```

CGAAGCTTTGATGTCGCTCCTGTGATGAGCATGGCAGT CGAAGTTTTGATGTCGCGCCCTGTGATGAGCATGACGTGCAGT CGAAGTTTTGATGTCGCGCCCTGTGATGAGCATGACGTGTGCGCTGTGATGAGCATGACGTGCGGCTGTGATGAGCCCTGGCGCTGGCTG	1083 GGCGGCTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCCTACTATCCAGGCCACTAC 1142		1323 AACAGCAACATTACAGTCCACTTCCATTCTGATCACTCGTACACGGACACCGGGGTTC 1382	1443 ACTGGACGGTGCATCCGAAAGGAACTGCGCGACGGCTGGGCAGACTGCCCGGATTAT 1502	1563 TGCAAGCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGTGGGGAAGTGACGGA	1683 AGCCAGAAGTGAATGGGAACAACTGTGGAGGTTCTGACGAGGTTCATGTGAC 1742	1803 AGCAAGGCCAACCCTGAGTGTGATGGGAAGACGGACTGTAGCGATGGCTCCGATGAGAA 1862 1741 AACAAGGCAACCCTGAGTGTGATGGAAAGAACTGCAGCGATGGCTCGGATGAGAAA 1800 1863 AACTGTGACTGTGGGATCCTTTACCAAACAGCTCGCGTGGTTGGT
8 6 6 6 6 6	8 6 8 6	G 43 43	8 8 8	\$ 6 B	\$ 6 6 8	& 8 & 8 8	8 8 8 8 8
KQVEKRGPRRWVVWAVVFSFLLLSLMAGLLVWHFHYRNVRIQKVFNGHLRITHBNFL DAYENSTSTEFISLAGQVKEALKLMYSEVPLGPYHKKSTVTAFSEGGNIAYWSEFS IPPHLEEEUDRAMARENVTLPPRAALKSFVTLTSVVAFPIDFMLGRTODNGCSFAL HARGHTVTRFTTPGFPNSPYPAHARCQWVLSGTFRSFDVAPCDGHDSDLV TVYDSLSPMEPHAVNLCGFFSPYNLTFLSSQNVFLYTLITNDRHPGFEATFFOL PWGSCTGLSEAGGTFSSPYYPGHYPPNINCTWNIKVPNNRNVKNPFKLFYLDDNI PWGSCTGLYVTRGTRERGERSQFYVSSNSSKTTVHHSBUBYTDTGFTAELYSTDSN DPCFGAMFMCYTGRGTRERGLERGOGSDERGGCSOGGGSDERGCCNATHOFMYC DSVNDCGDGSDEGGSPCGSPROSPERGNCCNATHOFMYC CTKYTYRCONGLCLINGNPECDGKKDCSDGSDERHCCNATHOFMYC DSVNDCGDGSDEGGSPCGSPROSPERGNCCOCKERFTKOARVGFTRANDSG EWPWQVSLHALGGGLCGASLISPDNLVSAAHCFQDETIFKYSDHTWMTAFLGLLDQS KRSASGVQEHKLITHDSPNNFTPDYDIALLELERGAFSFYVRPR CLIDDQS KRSASGVQEHKLITHDSPNNFTPDYDIALLELERGAFSFYVRPR CLIDDQS KRSASGVQEHKLITHQSTAILLQKGBIRVINQTTCEELLPQQITPRWMCVGFLSGGV DSCQGDSGGPLSSVEKDGRIRQAVSWGEGCAQRNKFGVYTRIPEVRDWIKEQTGV" ORIGIN S59 a 708 c 746 g 555 t	Query Match 74.5%; Score 2313.6; DB 10; Length 2568; Best Local Similarity 93.8%; Pred. No. 0; 0. 0. 0. 0. Matches 2409; Conservative 0; 0. Mismatches 159; Indels 0; Gaps 0; 63 ATGGGTAGCAATCGGGGCCGCAAGGCCGGAAGGCCTCTCAAGACTTCGGGGGGGACTC 122 1	123 AAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAGGGTGTGGAGTTCCTGCCT 182 AAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGGGTGTGGAGTTCCTGCCT 120 BAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGGTGTGGAGTTCCTGCCT 120 BAGTACAACCAAGAAAGTGGAGAACCGAGGCCCCAGGCGTGGGGTGGTGGTGGCG 242 C	GTGCTGTTCAGCTTCCTCTTGCTCTCCTCATGGCTTGCTGGTGGGCATTTGCTCCAT GTGCTGTTCAGCTTCCTTTTGCTCTCCCTCATGGCTTGCTGGTGGGCACTTCCAT AATCGGAATGTCGGCGTTCAAAAAGTCTTCAATGGCCATTGAGGATCAAATGAGATC TATCGGAATGTCAGGGGTTCAAAAAGTCTTCAATGGCCATCTGAGGATCAAATGAGATC TATCGGAATGTCAAAAAAGTCTTCAATGGCCATCTGAGGATCAAATGAGATC TATCGGAATGTCAAAAAAGTCTTCAATGGCCATCTGAGGATCAAATGAGATC TATCGGAATGTCAAAAAAAGTCTTCAATGGCCATCTGAGGATCAAATGAGATCAAATGAAAAAAAA	TITCIGGAIGCGTAIGAGAACTCCACTCCACAGAGTTTAICAGCCTGGCCAGCCAGGGG 4	TCGGCTGTAACTGCTTCAGTGAGGCAGTGTCATCGCCTACTGCTCAGAGATTCAGC 54 TCGACTGTAACTGCCTTCAGTGAGGCAGTGTCATCGCCTACTACTGCTCAGAGTTCAGC 54 TCGACTGTAACTGCCTTCAGTGAGGCAGCGTCATTGCCTACTACTGGTCAGAGTTCAGC 48 ATCCCCCCCCCACACACAGAGAGTTGATCGCCCATGGCTGTGGAGGTTGTAACA 60 ATCCCCCCCCCACACACAGAGAGAGTTGATCATCGCCCATGGGAGGGA	TIGCCACCCGAGCACGGGCACTGAAATCCTTCGTGCTAACATCTGGGGGGCTTCTCCC	CATGGTGCAGCAGTGACGCTTCACTACCCCTGGCTTCCCCAACAGTCCTACC CATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCTTCCCCAACAGTCCCTACC CGTGGCAGGACAGTGACGTTTCACTACCCTGGGCTTCCCTAACAGTCCCTACC CATGCCCGCTGCCAGTGGGTCCTGCGGGGGACGCCGACTCTCTGCTGAGCCTCAC CATGCCCGCTGCCAGTGGGTCCTGCGGGGGAACGCCGACTCTGTGCTGAGCCTCACACTCACACTCACACTCACACACA

g δ 셤

à 엄 ð d à g à g ò g ò a

à

```
Contact: nisc greenhart.nih.gov
Akhter, N., Ayele, K., Beckstrom-Sternberg, S.M., Benjamin, B.,
Blakesley, R.W., Bucuffard, G.G., Breen, K., Brinkley, C., Brooks, S.,
Blakesley, R.W., Bucuffard, G.G., Breen, K., Brinkley, C., Brooks, S.,
Hansen, N., Ho, S.-L., Karlins, E., Laric, P., Legaspi, R., Maduro, Q.L.,
Masiello, C., Maskeri, B., Mastrian, S.D., McCloskey, J.C., McDowell, J.
Pearson, R., Stantripop, S., Thomas, P.J., Touchman, J.W., Tsurgeon, C.,
Vogt, J.L., Walker, M.A., Wetherby, K.D., Wiggins, L., Young, A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /codon_start=1
/product="suppression of tumorigenicity 14 (colon carcinoma, matriptase, epithin)"
/protein id="AH19532.1"
/db_xref="G1:2098875"
/translation="MGSDRARKGGGEPKDFGAGLKYNSRHEKVNGLEEGVEFLPVNNV
KKVEKHGPGRUVLLAVLIGILLVLLGIGFLVWHLQYRDVRVVKNGYMRITNENFV
DAXENSNSTEFVSLASKVKDALKLLYSGVPFCAPYHKESAVTAFSEGSVIAYYMSEFS
IPQHLVBEAERVWALERRVWLDPRARSLKSFVVTSVVAFFTDSKTVQRTQDNSCSFGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HARGVELMRFTTPGFPDSPYPHARCQWALRGDADSVLSTFRSFDLASCDERGSDLV
PVYVTLSBMEPHALVQLCGYPPSPYNTFPSSQVLLITTITTTWTERRHPGFRATFRQL
PVYTLSBMEPHALVQLCGTPPSPYNTFPSSQVVLLITTITTTWTERRHPGFRATFRQL
PAGTCPKOYVEIRARACTERSPYTPSPNTSNSNKITVRFHSDQSYTDTGFLAEYLSFRQL
PAGTCPKOYVEIRARCYGERSQFVVTSNSNKITVRFHSDQSYTDTGFLAEYLSFRGS
PSCPGQPFTCTGRCIFRCERCOGWADCTDHSDBLNGSCDAGHOFTCKNKFCKPLFWVC
DSVNDCGDNSDRQGSCSPAQTFRCSNKKCLSSKQQCMGXDDGGDSSBRASCPRVNVVY
CTKHTYRCLNGLUSKGNPRCDGKEDCSDGSDBKOCGGLRSFTRQARVVGGTDADBG
                                                                                                                                                                                                                                                                                                                                                                                                                                             be found
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EWPWQVSLHALGQGHICGASLISPNMLVSAAHCYIDDRGFRYSDPTQWTAFLGIHDQS
GRSABVQVSERLKRIISHPFRDFFPPDIJALLELEEKRARSSBWRFDCLEDBASHVFP
AGKAIWYGWGHTQYGGTGALILQKGEIRVINQTTGRNLPQQITPRMACVGFLSGGV
DSCQGDSGGPLSSVEADGRIFQAGVVSWGDGCAQRNKFGVYTRLPLFRDWIKKNTGV"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181 CTGCGAACAATGCCAAGAAAGTGGAGAAGCGAGGCCCCCAGGCGCTGGGTGGTGCTGGTGG 240
                                                                                                                                                                                                                                                                                                                                                                                                                                    Clone distribution: MGC clone distribution information can be for through the I.M.A.G.E. Consortium/LINL at: http://image.llnl.gov Series: IRAK Plate: 64 Row: k Column: 15
This clone was selected for full length sequencing because it passed the following selection criteria: Similarity but not identity to protein.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCATGGGTAGCAATCGGGCCCGCAAGGCCGGAGGGGGGCTCTCAGGACTTCGGCGCGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         116 CCATGGGGAGCGATCGGGCCCGCAAGGGCGGAGGGGCCCGAAGGACTTCGGCGGGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCAAGTACAACTCCCGGCTAGAACATGAATGGCTTTGAGGAGGTGTGGAGTTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        176 TCAAGTACAACTCCCGGCACGAGAAAGTGAATGGCTTGGAGGAAGGCGTGGAGTTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    57 cardadadecedecedecadadadadadecerereradadaceecedeada ecrecadada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 CATGGTAGACGCCTGCCCGGAGGGACCACGCGTCTGAGACCGGCGATCGGACCGCCCAAAA
         cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: National Institutes of Health Intramural Sequencing Center (NISC),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61.4%; Score 1905.6; DB 9; Length 3273; 81.3%; Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /m_xref="taxon:9606"
/db_xref="taxon:9606"
/clone="MGC:40392 IMAGE:5213189"
/tissue_type="Blood, adult leukocytes"
/clone_lib="NIH"MGC_118"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           514;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note="Vector: pCMV-SPORT6"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 589
                                                                                          Gaithersburg, Maryland;
Web site: http://www.nisc.nih.gov/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="LocusID:6768"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .2685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1001 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Sim
Matches 2260;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                           2162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2460
2402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BC030532 3273 bp mRNA linear PRI 20-MAY-2002 Homo sapiens, suppression of tumorigenicity 14 (colon carcinoma, matriptase, epithin), clone MGC:40392 IMAGE:5213189, mRNA, complete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCCGGCAAAGCCATCTGGGTCACAGGCTGGGGCCACACGAAAGAAGAAGAAGTGGAACTGGAGCA 2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       crearccrecagaaddaaadarccagarcarcaaccagaccaccrergagaacrerre 2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 3273)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Direct Submission
Submitted (07-MAX-2002) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                              TGTGGGGGCCTCGCTCTCTCTCTGGCTGGTCTCTGGAGCTCATTGCTTTCAGGAT
                                                                                                                                                                                                                                                                                                                                                               CCCCACCACACACCCCCACCAATGATGATGTGTGGGTTTCCTCAGTGGGGGTGTGGAACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGCCAGGGTGATTCCGGTGGCCCCTTGTCCAGTGTGGAGAAAGATGGGCGAATCTTCCAG
                                                                                                                                                                                                                                                         GAGACAATTTTCAAGTACTCAGACCACATGTGGACAGCCTTCCTCGGTCTGCTGGAC
                                                                                                                                                                                                                                                                                                                     CAGAGCAAGCGCAGTGCCTCTGGGGGGGGGGGGGAGCTCAAGCTAACGTATCATCACCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTTCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTGCTGGAGCTGGAGAAGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cerrectrinardaetrinacrinedaetardaetridecridendeaderdaadaadeed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GIGGAGTACAGCACCGTCGTGCCCCCATCTGCCTGCTGATGCTACCCATGTCTTCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCAGAGTACAGCACTGTCGCCCCCATCTGCCTGCCTGATAATACCCATGTCTTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTGGCAAGGCCATCTGGGTCACAGGCTGGGGGCCACACAAAAGAGGAGGTACCGGAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACCTGTGAGGACCTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCGCAGCAGATCACCCCACGAATGATGTGTGTGGGGTTTCCTCAGTGGGGGGTGTGGAACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGAAAAAAAGATGGGCGAATGTTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTGGTGTGGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAACAAGCCAGGCGTGTACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTGGTGTGTGAGCTGAAGGCTGCGCTCAGAGGAACAAGACCAGGCGTGTACACA
                                                                                                                                                                                                      GACAAAAATTTCAAGTACTCAGACTACAGATGTGGACGGCCTTCCTGGGTCTGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGGGTATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2521 AGGATCCCTGAAGTTCGGGACTGGATCAAAGAGCAAACTGGGGTATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NIH-MGC Project URL: http://mgc.nci.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BC030532.1 GI:20988874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Strausberg, R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BC030532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2461
                              1861
                                                                                                                                             1921
                                                                                                                                                                                                      2043
                                                                                                                                                                                                                                                            1981
                                                                                                                                                                                                                                                                                                                     2103
                                                                                                                                                                                                                                                                                                                                                                              2041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2583
                                                                                       1983
                                                                                                                                                                                                                                                                                                                                                                                                                                    2163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BC030532
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
```

ð

ð g ₽ q

1316 ACTACGTGGAGATTACAGTCCACTTCCGGAGAGAGGTCCCAGTTCGTCGTCACCA 1375 1321 GCAACAGCAACAGGATTACAGTTCCACTTCCATTCTGATCACTCGTACACCGGGT 1380	1501 ATAGTGATGAGCGTTACTGCCGATGCAATGCCACCACCACCTTCAGGTGCAAAAACCAGT 1560 1516 ACAGGATGAGCTGACTGCAGTGCACGGCCACCACCTTCAGGTGCAAAAACAATGCAGTTCAGGTTCAGGTGCAAGAACAAGTTCAGGTTCAGTTCAGTTCAGTTCAAGTAAGAACAAGTT 1615 1561 TCTGCAAGCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGTGGGGAACAGAGGTG 1620 1616 TCTGCAAGCCCTCTTCTGGGTCTGTGAACAGTGTCAACGAACAACAGCGACA 1675	1621 AGGAGGCTGCAGCTGCTGGGAGTTTCAAGTGTTCCAATGGGAAGTGTCTCCCTC 1680	1736 AAAGCCAGCAATGGAAAGGACGACTGTGGGGCTCCGACGAGGCTCTGCC 1795 1741 ACAGCGTGAATGTCGTCTCTTGTACCAAATATACCTACCGCTGCCAAAAATGGCCTCTGTC 1800 1741 ACAGCGTGAATGTCGTCTTTTTGTACCAAAATATACCTACGCTGCCAAAAATGGCCTCTGTC 1800 1796 CCAAGGTGAACGTCGTCACTTGTACCAAAACACCTACCGCTGCCTCAATGGGCTCTGCT 1855		AAAACTGTGACTGTGGGCTGCGATCCTTTACCAAACAGGCTCGCGTGGTTGGT	ATGCGGACGACGCCAGGCCCTGCCAGGCCTCCACGCCCTGGGCCAGGCCACT	TGTGTGGGGCCTCGCTCATCTCCTGCTGGTGGTCTCTGGAGCTCATTGCTTTCAGG	ATGACAAAAATTTCAAGTACTCAGACTACGATGTGGACGGCCTTCCTGGGTCTGCTGG 	2101 ACCACAGCAAGCGCAGTGCTCTGGGGTGCAGGTGTGAAGCTCAAAGGTATCATCACCC 2160	2161 ACCCTTCCTTCATGATTTCACCTTCGACTATGACATCGCCTTGCTGGAGCTGGAGAAGT 2220 2216 ACCCCTTCTTCAATGACTTCACCTTCGACTATGACATCGCGCTGCTGGAGGAAAC 2275	2221 CGGTGGAGTACAGCACCGTCGTGCCCCATCTGCCTGATGCTACCCATGTCTTCC 2280 [2281 CTGCTGGCAACCTGGGTCACAGGCTGGGGGCACACAAAAGAGGGGGGGTACCGGAG 2340	2341 CGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACCACCTGTGAGGACCTCA 2400
8 8 8 8 8 8	8 6 8 6	8	원 장 연	8 8	දු දු	දි දි	8 8	& A	& A	<i>₹</i> ∂ 6	VQ QQ	රු සි	දි සි
	CAAGA CAAGG GTTCA	AGICGGCTGTGAGGGCTTCAGCGAGGGGGGTCATCGCCTACTACTGGTCTGAGTTCA 595 GCATCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCATGGCTGGAGGGGGGGTTGTA 600		CCACGGGTGTGGAGAGCGTGAGGGACACACGGTTGCAGCTTTGGCCTGCAGG 775 CCCATGGTGCAGCAGTGACACGCTTCACCTACCTGCCTTCCCCAACAGTCCCTACCGG 780 [CCGAAGCTITGATGTCGCTCCTGTGATGAGCATGACCAGTGACCTGGTCACCGTGTATG 900	AIRGCCTGAGCCCCATGGAACCCCACGCTGTGGGGCTGTGTGGGACCTTCTCACCCT 960	CCTACAACCTGACTTTCCTCCCCCGGAACGTCTTCCTTGTCAGGATAACCAATA 1020 	CTGACCGGCGACATCCTGGCTTTGAGGCCACTTTCTTCCAGCTGCCCCAAGATGAGCAGCT 1080	GTGGCGGCTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCCTACTACTATCCAGGCCACT 1140	ACCGGCCCAACATGAACTGGAATATCAAGGTGCCCAACAACGGGAACGTGAAGG 1200	CAAGG	GAGCA

8.

임

à 원 δ g

à

Пр

à g ð

ð

g

à В

```
I PATENTAL STANDARD STANDARD SOUTH SOUTH SOUTH WEST SOUTH STANDARD SOUTH WEST SOUTH 
                                          /translation="MGSDRARKGGGGPKDFGAGLKYNSRHEKVNGLEEGVEFLPVNNV
KKVEKHGFGRWYVLAAVLIGLLLVLLGIGFLVWHLQYRDVRVQKVFNGYMRITNENFV
DAYENSNEFEVSLASKVKDALKLLYGGVFFLGPYHKESAVTAFSEGSVIAYYWSEFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             263 GTGGCATTTGCAGTACCGGGACGTGCGTGTCCAGAAGGTCTTCAATGGCTACATGAGGAT 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCCTACCCGGCGCATGCCCGCTGCCAGTGGGTCCTGCGGGGGGACGCCGACTCTGTGCT 829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGCTCTCAGGACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGGCGCGCGACTCAAGTACAACTCCCGGCTAGAACATGAATGGCTTTTGAGGAGGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cedecededacticaactactecedecacadaaactedecetredagaaaeecer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                143 GGAGTTCCTGCCAGTCAACAACGTCAAGAAGGTGGAAAAGCATGGCATGGCCCGGGGCGCTGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        203 Gerecrescas de recrear descereir de recreares de recreas de recreas de recreas de recrear de re
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTTTATCAGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACAAATGAGAATTTTGTGGATGCCTACGAGAACTCCAACTCCACTGAGTTTGTAAGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTACCACAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTACTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGCCTGCACGCCCGCGGTGTGGAGCTGATGCGCTTCACCACGCCCCGGCTTCCCTGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCCTCGGGGACCATGGGGAGCGATCGGGCCCCCCAAGGGCGGAGGGGCCCCGAAGGACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              170 GGAGTTCCTGCCTGCGAACAATGCCAAGAAGTGGAGAAGCGAGGCCCCAGGCGCTGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTGAGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGCCAGCCAGGTGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTGGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         383 GGCCAGCAAGGTGAAGGACGCGCTGAAGCTGCTGTACAGCGGAGTCCCATTCCTGGGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             443 CTACCACAAGGAGTCGGCTGTGACGCCTTCAGCGAGGGCAGCGTCATCGCCTACTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             503 GICTGAGTTCAGCATCCCGCAGCACCTGGTGGAGGCCCGAGCCCGTCATGGCCGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGTGGCTTTCCCCACGGACTCCAAAACAGTACAGAGGACCCAGGACAACAGCTGCAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGCCCTGCATGCCCCATGGTGCAGTGACACGCTTCACTACCCCTGGCTTCCCCCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTCAGAGTTCAGCATCCCCCCACACCTGGCAAAGAGGTTGATCGCGCCATGGCTGTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCGAGTTGTAACATTGCCACCCCGAGCACGGGCACTGAAATCCTTCGTGCTAACATCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCGCGTAGTCATGCTGCCCCCGCGGCGCCTCCCTGAAGTCCTTTGTGGTCACCTCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTGGCCTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGCAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 3149;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           504;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        581 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1889.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    962 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 60.8%;
Best Local Similarity 81.4%;
Matches 2222; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ๗
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ठे
                                                                                                                                                                                                                                                                                                            2580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2700
                                                                                                                                                                                                                                  2575
                                                                                                                                                                                                                                                                                                                                                                                                                                                CAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGGGTATAGCAGCATGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRI 30-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               serine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ы
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                            AGGCTGGTGTGGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAACAAGCCCAGGCGTGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2752 GCAGGCTGGAGACTGGCTGCTGCACCAGCGCCC-CCAGAACATACACTGTGAACT
                                          ctrieccassistatriccesesarcceristicascerasasecesarissesesarcrites
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAAGGCTCCCTCTGTTTCGGGACTGGATCAAGAGACACTGGGGTATAGGGGCCGGG--
TGCCGCAGCAGATCACCCCACGAATGATGTGTGTGTGGGGGTTTCCTCAGTGGGGGGTGTGGACT
                                                                                                                                                CCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGAGAAAGATGGGGCGAATGTTCC
                                                                                                                                                                                                                                                                                                                                                                      AGGCCGGTGTGGTGAGCTGGGCTGCCTCAGAGGAACAAGAGCCAGGCGTGTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2641 AGACAGCCGACCACACCCCACAGGGATGCCCGACATGCACACCTGGATACAGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          - GCCACCCAAATGTGTACACCTGCGGGGCCACCCATCGTCCACCCCAGTGTGCACG-CCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAACACTGACGACATTTATGCTGTGGCCTCCCCCCCCCAACACCACAGACTGTGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lin,C.Y., Anders,J., Johnson,M., Sang,Q.A. and Dickson,R.B. Direct Submission
Submitted (06-JAN-1999) Lombardi Cancer Center, Georgetown
University Medical Center, 3970 Reservoir Road NW, Washington,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (30-DEC-1999) Lombardi Cancer Center, Georgetown
University Medical Center, 3970 Reservoir Road NW, Washington,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 2955)
Lin.C.Y. Anders, J. Johnson, M., Sang, Q.A. and Dickson, R.B. Molecular cloning of CDNA for matriptase, a matrix-degrading processes with trypsin-like activity (J. Biol. Chem. 274 (26), 18231-18236 (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 36. .. 2603
/function="degrade extracellular matrix"
/note="serine protease with trypsin-like activity;
contains Cir/s and LDL receptor domains"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  version replaced gi:5359674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AFI18224 3149 bp mRNA
Homo sapiens matriptase mRNA, complete cds.
AFI18224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 (bases 1 to 3149)
Oberst, M.D., Dickson, R.B. and Lin, C.Y.
Direct Submission
Submitted (30-DEC-1999) Lombardi Cance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .3149
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence update by submitter
On Dec 30, 1999 this sequence
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /product="matriptase"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2761 GCATCCTTAGGACTCAGAGT 2780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2811 CAÁTCTCCAGGGCTCCAÁAT 2830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AF118224.2 GI:6647301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (bases 1 to 2955)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20007, USA
3 (bases 1 to 3149)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99303581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10373424
                                                                                                                                                                                                                                                                                                2521
                                                                                                                                                                                                                                                                                                                                                                                                                                                2581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2701
                                                                                                                                                                                                                  2516
                                                                                                                                                                                                                                                                                                                                                                          2576
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2636
2401
                                                                      2456
                                                                                                                                                2461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AF118224
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
MEDLINE
PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT
```

3, 109

Gaps

169 142

82

289 262 349 409 382 469 529

502 589 562

442

649

622 709 682 769

427 513 487 547 633 607 693 667 753 813

787 873

727

847

933 907

```
TCAACAGCCCCTACTACCCAGGCCACTACCCAACATTGACTGCACACTGGAACATTG 1147
                                                                                                                                                                                                                               TCCCATTCCTGGGCCCCTACCACAAGGAGTCGGCTGTGACGGCCTTCAGCGAGGGCAGCG
                                                                                                                                                                                                                                                                                                                                                                    TCATCGCCTACTGCTCTGACTTCAGCATCCCGCAGCACCTGGTGGAGGAGGCCGAGC
                                                               CAGAGITITAICAGCCIGGCCAGCIGAAGGAGGCGCIGAAGCIGCIGITACAAIGAAG
                                                                                                                           368 CIGAGITIGIAAGCCIGGCCAGCAAGGIGAAGGACGCGCTGAAGCTGCTGTACAGCGGAG
                                                                                                                                                                                          TCCCTGTCCTGGGTCCCTACCACAAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTG
                                                                                                                                                                                                                                                                                                                  TCATCGCCTACTACTGGTCAGAGTTCAGCATCCCCCCACACCTGGCAGAAGAGGTTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCGTGCTAACATCTGTGGTGGCCTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tréfedroacercaéres de controcción es a contra contra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAACAGCTGCAGTTTTGCCCTGCATGCCCATGGTGCAGCAGTGACACGCTTCACTACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCGTCATGGCCGAGGAGCGCGTAGTCATGCTGCCCCCGCGGGGCGCCCCTCCTGAAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Acaacadoridos de la contra del la contra de la contra del la con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGGCTTCCCTGACAGCCCCTACCCCGCTCATGCCGCTGCCAGTGGGCCCTTGCGGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCGCCATGGCTGTGGAGCGAGTTGTAACATTGCCACCCCGAGCACGGGCACTGAAATCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCGGCACCAGCAGCACGTGACGGTGTACAACACCCTGAGCCCCCATGGAGCCCCCACGCCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGGGGCTGTGTGGCACCTTCTCACCCTACAACCTGACTTTCCTCCTCCCAGAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGCTTCCCCAACAGTCCCTACCCGGCGCATGCCCGCTGCCAGTGGGTCCTGCGGGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACGCCGACTCTGTGCTGAGCCTCCACCTTCCGAAGCTTTGATGTCGCTCCCTGTGATGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGGCAGTGACCTGGTCACCGTGTATGATAGCCTGAGCCCCCATGGAACCCCACGCTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTTCCTTGTCACGCTGATAACCAATACTGACCGGCGACATCCTGGCTTTGAGGCCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTTCCAGCTGCCCAAGATGAGCAGCTGTGGCGGCTTTTTGAGTGACACCCAAGGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rcrirccascrascardascascraresadescescriraceraassceraesesacar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTAGCAGCCCCTACTATCCAGGCCACTACCCGCCCAACATCAACTGCACATGGAATATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGIGCCCAACAACGGGAACGIGAAGGIGCGCTICAAACTCTICTATCTGGTGGACCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1234 ACGTACCAGTGGGCTCCTGCACCAAGGACTATGTGGAGATCAACGGGGAGAAGTACTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAGAGGTCCCAGTTTGTGGTGAGCAGCAACAGCAGCAAGATTACAGTCCACTTCCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGATCACTCGTACACGGACACCGGGTTCCTAGCTGAGTACCTCTCCTACGACTCCAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cadarcagrecracacacacacacrecraracraaaraccrecracaara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCCGTGCCCAGGGATGTTCATGTGCAAGACTGGACGGTGCATCCGAAAGGAACTGCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1388 ACCCATGCCCGGGGCAGTTCACGTGCCGCACGGGCGGTGTATCCGGAAGGAGCTGCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            608
                                                                                                                                                                                                                                                      428
                                                                                                                                                                                                                                                                                                                  514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1208 (
                                                            394
                                                                                                                                                                                          454
                                                                                                                                                                                                                                                                                                                                                                               488
                                                                                                                                                                                                                                                                                                                                                                                                                                              574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1414
                                                                                                       ď
                                                                                                                                                                                    à
                                                                                                                                                                                                                                      q
                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAGTCENDYNEINGEKYGERQFVVTSNSNKITYVRHSDGSYTDTGFLAEYLSYDSS
DPCPGOPTCRCRCTRKELRCDGWADCTDHSDELNGSCDAGHQFTCKNKFCKPLFWVC
DSVNDCGDNSDEGGGSQTFRCSNGKCLSKSQQCNGKDDGGBSBRASCPRKNVYT
CTKHYYRCLNGLCLSKGNPGCDGKEDCSDGSDEKDCDGGLRGFTRQARVVGGTDADEG
ENPWQVSLHALGQGHLCGASLISPNYLVSAAHCYIDDRGFRYSDPTQWTAFLGLHDQS
QRSAFGVQERRLKRIISPFNDFTPDIALLEEKRAEYSSWRRFICCLDPASHVFP
AGKAIWYTGWGHTGYGGTGALILGKGBIRVINGYTCENLLEQOLTPERMYCWGFLSGGY
DSCCQDSGGFLSSVVEADGRIFOGGTVSWGDGCAQRNKFGVYRLLFDLFRDMIKENTGY"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /tränslation="MGSDRARKGGGGPKDFGAGLKYNSRHEKVNGLEEGVEFLPVNNV
KKVEKHGPGRWVVLAAVLIGLLLVLLGIGFLVWHLQYRDVRVQKVFNGYMRITNENFV
DAYENSNSTEFVSLASKVKDALKLLYSGVPFLGPYHKESAVTAFSEGSVIAYYMSEFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IPQHLVEEAERVWAEERVVMLPPRARSLKSFVVTSVVAFPTDSKTVQRTQDNSGSFGL
HARGVFLIRFTTPGFPDSPYPAHARCQWALRQDABSVLGLTFREPDLASCDERGSDLV
TVYNTLSPMEPHALVQUCGTYPSPXNLTFRSQNVLLTTLITUTTLTTTTERFPDEATFPQL
PRMSSCGGRLRKAQGTFNSPYYPGHYPPNIDCTWNIEVPNNQHYKRRFRFFYLLBERQV
                                                                                                                           to
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 3120)
Takeuchi,T., Shuman,M.A. and Craik,C.S.
Reverse biochemistry: use of macromolecular protease inhibitors to dissect complex biological processes and identify a membrane-type Serine protease in epithelial cancer and normal tissue proc. Natl. Acad. Sci. U.S.A. 96 (20), 11054-11061 (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGGCCCGAAGGACTTCGGCGCGGGACTCAAGTACAACTCCCGGCACGAGAAGTGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGAGACCGGCGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGGCTGGCTTGCTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAGTCTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGCCATCTGAGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGGCTCTCAGGACTTCGGCGGGGACTCAAGTACAACTCCCGGCTAGAACATGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTTTGAGGAGGGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAAAAGCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCCCAGGCGCTGGTGCTGGTGGCAGTGCTGTTCAGCTTCCTCTTGTTGCTCCTCA
                                                                                                                                                                                                                                                                                           Takeuchi,T., Shuman,M.A. and Claim, ...
Takeuchi,T., Shuman,M.A. and Claim, ...
Direct Submission
Submitted (44-MAR-1999) Dept. Pharm. Chem., University of Submitted (44-MAR-1999) Dept. Pharms San Francisco, 513 Parnassus Ave., Box 0446, San Francisco, CA 94143-0446, USA
Francisco, CA 94143-0446, USA
Location/Qualifiers
1. 3120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'note="MT-SP1; chymotrypsin clan serine protease"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 3120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    447; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   product="membrane-type serine protease
protein id="AAF00109.1"
    db_xref="GI:6002714"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1884.8; DB 9;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/cell_line="PC-3"
/cell_type="prostate carcinoma"
37. .2604
                                                                                                                                                                                                                                                                                 SUULZZ
(bases 1 to 3120)
Penchi.T., Shuman,M.A. and Craik,C.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             571 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          964 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            codon start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60.7%;
82.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 60.7
Best Local Similarity 82.8
Matches 2164; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Φ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            308
                                                                         AUTHORS
TITLE
                                                                                                                                                                                                    JOURNAL
MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNT
                                                                                                                                                                                                                                                                                              REFERENCE
                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BASE CC
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
```

1113

1053 1027

993

196

1173

1293

1207

1353

1327 1413

1267

1473

a a

q

d δ

ð

g

à 임 à

8

g

 δ g ð d d

à

g

à

d

 $\stackrel{>}{\circ}$ g δ g $\dot{\delta}$

ò

qq

쉽

ð

임 à q ð 셤 ð.

à

```
Yamaguchi, N. and Mitsui, S.
Molecular cloning of a novel transmembrane serine protease
expressed in human prostate
Unpublished
2 (bases 1 to 3128)
Yamaguchi, N. and Mitsui, S.
Direct Submission
Submitted (14-JUL-1999) Nozomi Yamaguchi, Kyoto Prefectural
University of Medicine, Res. Ins. Geriatrics; Kawaramachi Hirokoji,
Kyoto, Kyoto 602-8846, Fax:81-75-251-5848)
Tel:81-75-221-5848)
Location/Qualifiers
  KKVEKHGPGRWVVLAAVLIGLLLVLLGIGFLVWHLQYRDVRVQKVFNGYMRITNENFV
DAYENSNSTEFVSLASKVKDALKLLYSGVPFLGPYHKESAVTAFSEGSVIAYYWSEFS
IPQHLVESAERVWAEERVVMLPPRARSLKSFVVTSVVAFPTDSKTVQRTQDNSCSFGL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAGTCPKDYVEINGEKYCGERSQFVVTSNSNKITVRFHSDQSYTDTGFLAEYLSYDSS DPOFDQPFFKTRRCIRKELAELCOGWADGCTDHSDBELNGSDDAGHQFTCKNKTCKPLEMYC DSVNDCGDNSDBQGGCSPAQTFRCSNGKCLSKSQQCNGCDDGCDGSDBASCPFKYNVVYCTKKTYRCLNGLCLSKGNPECDGKEDCSDGSDENGCDGCDGLRSFTRQARVVGGTDADGG
                                                                                                                                                                                                                                                              PRI 06-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                translation="MGSDRARKGGGGPKDFGAGLKYNSRHEKVNGLEEGVEFLPVNNV"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HARGVELMRFTTPGFPDSPYPAHARCQMALRGDADSVLSLTFRSFDLASGDERGSDLV
TVYNTLSPMEPHALVQLCGTYPPSYNLTFHSSQNVLLITLITNTERRHPGFEATFFQL
PRMSSCGGRLRKAQGTFNSPYYPGHYPPNIDCTWNIEVPNNQHVKVRFKFFYLLEPGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EWPWQVSLHALGQGHICGASLISPNWLVSAAHCYIDDRGFRYSDPTQWTVFLGLHDQS
QRSAPGVQERRLKRIISHPFFNDFTFDYDIALLELEKPAEYSSMVRPICLPDASHVFP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ÄGKAIWVTGWGHTQYGGTGALILQKGEIRVINQTTCENLLPQQITPRMMCVGFLSGGV
BSCQGBSGGPLSSVEADGRIFQAGVVSWGBGCAQRNKPGVYTRLPLFRDWIKENTGW"
                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGGCTCTCAGGACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGGCGCGCGCACTCAAGTACAACTCCCCGCTAGAACATGAATGCCTTTGAGGAGGGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               170 GGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAGCGAGGCCCCCAGGCGCTGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 GCCTCGGGGACCATGGGGAGCGATCGGGCCCGCAAGGCCGGAGGGGGCCCGAAGGACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               63 CGGCGCGCGCACTCAAGTACAACTCCCGGCACGAGAAGTGAATGGCTTGGAGGAAGGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 3128;
                                                                                                                                                                                                                                                            mRNA linear complete cds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           504; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60.7%; Score 1884.6; DB 9;
81.4%; Pred. No. 0;
ive 0; Mismatches 504;
                                                                            2614 AGCACACTGGGGTATAGCAGCATGGACAGACA
                                                                                                                               AGAACACTGGGGTATAGGGGCCGGGGCACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        protein_id="BAB20376.1"
db_xref="GI:12249015"
                                                                                                                                                                                                                                                      Homo sapiens mRNA for prostamin, AB030036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /tissue_type="prostate"
16. .2583
/codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                product="prostamin"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              956 g
                                                                                                                                                                                                                                                                                                                                         AB030036.1 GI:12249014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 60.7%;
Best Local Similarity 81.4%;
Matches 2222; Conservative
                                                                                                                                                                                                                                                                                                                                                                 prostamin.
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              954 C
                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (sites)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              637
                                                                                                                               2588
                             2528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                       RESULT 9
AB030036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                          ò
                             셤
                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                         1653
                                                                                                                                                                                                                                                                                                                                                              1687
                                                                                                                                                                                                                                                                                                                                                                                                           1773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1988 résricreccecacacrecracarcaridadas de arricas de reconece de 2047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2527
1474 GCGACGGCTGGCCAGACTGCCCGGATTATAGTGAGCGTTACTGCCGATGCAATGCCA 1533
                                               1448 GTGATGGCTGGGCCGACTGCACCGACCACGATGAGCTCAACTGCAGTTGCGACGCCG 1507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ceracescrecercairescriciserreasesaasescricaserereasesaases 1807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCGCAGGCTCAAGCGCATCATCTCCCCTTCTTCAATGACTTCCACCTTCGACTATG 2167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2554 CTCAGAGGAACAAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAG 2613
                                                                                                                                                                                                                                                                                                                                                                                                        GAGATGGGGTCTGACGAGGCTTCATGTGACAGCGTGAATGTCGTCTTTGCACCAAATATA
                                                                                                                            1808 AGGACTGTAGGACGGCTCAGATGAGAAGACTGCGACTGTGGGGCTGCGGCACTTCACGA
                                                                                                                                                                                                                                                                                                      AGTGTTCCAATGGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAAGGACAACTGTG
                                                                                                                                                                                                    TCAACGACTGTGGGGACGGAAGTGACGAGGAGGCTGCAGCTGTCCTGCAGGTTTCA
                                                                                                                                                                                                                                                 1628 GGTGTTCCAATGGGAAGTGCCTCTCGAAAAGCCAGCAGTGCAATGGGAAGGACGACTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGACGGGTCCGACGAGGCCTCCTGCCCCAAGGTGAACGTCGTCACTTGTACCAAACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTACCGCTGCCAAAATGGCCTCTGTCTGAGCAAGGCCAACCCTGAGTGTGATGGGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1894 AACAGGCTCGCGTGGTTGGTGGCACGAATGCGGACGAGGGCGAGTGGCCCTGGCAGGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1868 GACAGGCTCGTGTTGTTGGGGGCACGGATGCGGATGAGGGCGAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCTCCACGCCCTGGGCCAGGGCCACTTGTGTGGGGGCCTCGCTCATCTCCTGACTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1928 GCCTGCATGCTCTGGGCCAGGGCCACATCTGCGGTGCTTCCCTCATCTCTCCCAACTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGTCTCTGCAGCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGACTACACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGTGGACGCCTTCCTGGGTCTGCTGGACCAGAGCGCAGTGCCTCTGGGGTGCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCTGAAGCTCAAACGTATCACCCACCCTTCCTTCAATGATTTCACCTTCGACTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2194 ACATCGCCTTGCTGGAGCTGGAGAGTCGGTGGAGTACAGCACCGTCGTGCGCCCCCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCTGCCTGATGCTACCCATGTCTTCCCTGCTGGCAAGGCCATCTGGGTCACAGGCTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCACACAAAAGAGGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2374 TCAACCAGACCAGCTGTGAGGACCTCATGCCGCAGCAGGAGTCACCCCACGAATGATGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2348 TCAACCAGACCACCTGCGAGAACCTCCTGCGGAGCAGATCACGCCGCGCGCATGATGTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGGTTTCCTCAGTGGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2408 TGGGCTTCCTCAGCGGGGGGGGACTCCTGCCAGGGTGATTCCGGGGGACCCCTGTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2494 GCGCGGAGAAAGATGGGCGAATGTTCCAGGCTGGTGTGAGCTGGGGTGAAGGCTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCGTGGAGGCGGATGGGCGGATCTTCCAGGCCGGTGTGAGCTGAGCTGGGAGACGCTGCC
                                                                                                  CCCACCAGITCACGIGCAAAACCAGITCIGCAAGCCCCTCITCIGGGICTGIGACAGIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGGACTGTAGCGATGCCTCCGATGAGAAAACTGTGAGTGTGGGCTGCGATCCTTTACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2168 ACATCGCGCTGCTGGAGCTGGAGAAACCGGCAGAGTACAGCTCCATGGTGCGGCCCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2228 GCCTGCCGGACGCCTCCCATGTCTTCCCTGCCGGCAAGGCCATCTGGGTCACGGGCTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2288 GACACACCCAGTATGGAGGCACTGGCGCTGATCCTGCAAAAGGGTGAGATCCGCGTCA
                                                                                                                                                                                                                                                    1568
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1688
                                                                                                  1534
                                                                                                                                                                                                                                                                                                      1654
                                                                                                                                                                                                                                                                                                                                                                                                        1714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1748
                                                                                                                                                                                                 1594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2314
```

109

169 122 229

245 CIGGIGGCATTIGCAGIACCGGGACGTGCTGCAGAGGTCTTCAATGGCTACATG 345 AGGATCACAAATGAGATTTCTGGATGCTATGAGACTCCACCCAC	ACACTCCCTACCCGGCGCATGCCCGTGCCAGTGGGCCCTGGGGGGGG
8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6	8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6
QY 2390 TGAGGACCTCATGCCGCAGCAGATCACCCCACGAATGTGTGGGTTTCCTCAGTGG 2449 Db 2343 CGAGAACCTCCTGCCGCAGCAGATCACCCGCGCATGATGTGCGTGGGCTTCCTCAGCGG 2402 Oy 2450 GGGTGTGGACTCCTGCCGGCGCATGATGTGCGTGGGCTTCCTCAGCGG 2509 2403 CGGCGTGGACTCCTGCCGGGGGGCCCTTGTCCAGCGTGGGGGGGG	AR081724 GI:10008450 AR081724 AR081724 AR081785 AR081724 AR08172

2505 GATGGGCGAATGTTCCAGGCTGGTGT	Oy 2565 AAGCCAGGCGTGTACACAAGGCTCCC	Oy 2625 GTATAGCAGCATGGACAGACAGCGA 	Qy 2685 CCTGGATACAGGAGAGGAACACTGAC Db 2642 CCAGTGTGCACG-CCTGCAGGCTGGA	0y 2745 ACCGAGACTGTGAACTGCATCCTTAC 	AR229704	110N Sequence 1 Irom parent 10N AR229704 N AR229704.1 GI:2726943. DS	SOURCE Unknown. ORGANISM Unknown. Unclassified. REFERENCE 1 (bases 1 to 3147)	AUTHORS Leon, J. W. IITLE Imaging member containing he method of use JOURNAL Patent: US 6451500-A 1 17-SE	FEATURES Location/Qualifiers Source .3147	ch 60.6%; Scill Similarity 81.2%; Pri	Matches 2223	1	65 165	125 225	Db 185 TGGGTGGTGGCTGGCAGCCGTGCTGAT OY 285 CTGGTGTGGCACTTCCATTATCGGAA	245 345	Db 305 AGGATCACAAATGAGAATTTTGTGGA Qy 405 AGCCTGGCCAGCCAGTGAAGGAGGC)
1425 GGGATGTTCATGTGCAAGACGGTGCATCCGAAGGAACTGCGCTGCGACGCTGG 1484 	154	ACGTGCAAAAACCAGTTCTGCAAGCCCCTCTTCTGGGTCTGTGAAGACTGTCAACGACTGT 	1605 GGGGACGGAAGTGACGAGGGCTGCAGCTGCTCCTGCTGGGGGTTTCCAAGTGTTCCAAT 1664 	1665 GGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGATGGGTCT 1724 	1725 GACCAGGCTTCATGTGACGCGTGAATGTCGTCTTTTGCACCAAATATACCTACC	1785 CAAAATGGCCTCTGTCTGAGCAAGGCAACCTGAGTGATGGGAAGACGGACTGTAGC 1844 	1845 GATGGCTCCGATGAGAAAACTGTGACTGTGGGCTGCGATCCTTTACCAAACAGGCTCGC 1904 	1905 GTGGTTGGTGGCACGAATGCGGACGAGGGGGGGTGGCCCTGGCAGGGGGCCTCCACGCC 1964	1965 CTGGGCCAGGGCCACTIGTGGGGGCCTCGCTCATCTCTCCTGACTGGCTGGTCTCTGCA 2024	2025 GCTCATTGCTTTCAGGATGACAAAAATTTCAAGTACTCAGACTACACGATGTGGAGGGCC 2084	2085 TTCCTGGGTCTGGACCAGAGCAGGGGGGGGGGGGGGGGG	2145 AAACGTATCATCACCCTTCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTG 2204	2205 CTGGAGCTGGAGAAGTCGGTGGAGTACAGCACCGTGCGCCCCATCTGCCTGC	2265 GCTACCCATGTCTTCCCTGCTGGCAAGGCCATCTGGGTCACAGGCTGGGGGGCACACAAAA 2324 2225 GCTCCCATGTCTTCCCTGCCGGCAAGGCCATCTGGGTCACGGGGGGACACACCAG 2284	2325 GAGGGGGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACC 2384 2285 TATGGAGGCACTGGCGCTGATCCTGCAAAAGGGTGAGATCCGCGTCATCAACCAGACC 2344	2385 ACCTGTGAGGACCTCATGCCGCAGCAGATCACCCCACGAATGATGTGTGTG	2445 AGIGGGGGGGGACTCCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGGGCGGAGAAA 2504 	
07 Db	à a	& d	Qy Dp	oy Op	65 65	Oy Db	95 PB	55 유	Qy Dp	g cy	Oy Dp	Qy Dp	Qy Dp	95 G	දුරු	ر الم	oy Dp	

S S	., .,	2505 GATGGGCGAATGTTCCAGGCTGGTGTGGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAAC 2564 [
Å q	., .,	2565 AAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGG 2624
<i>장</i> 셤		2625 GTATAGCAGCATGGACGACCGACCAAACACCCACAGGGATGCCCGACATGCACA 2684
상 음	., .,	2685 CCTGGATACAGGAGAACACTGACGACATTTATGCTGTGGCCTCCCCCCCAACACA 2744
\$ A	., .,	2745 ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
REK LOCK LOCK PECK VEH VEH VEH VEH VEH VEH VEH VEH VEH VEH	RESULT 11 AR229704 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM	AR229704 Sequence 1 AR229704 AR229704.1 Unknown.
RE!	REFERENCE AUTHORS TITLE	unclassin 1 (bases Leon, J.W. Imaging m
FEI BAS	JOURNAL FEATURES SOUIC BASE COUNT	method of use Patent: US 6451500-A 1 17-SEP-2002; Location/Qualifiers ce 13147 /organism="unknown" T 654 a 952 c 958 g 583 t
ОщЕ	Query Ma Best Loc Matches	/ Match 60.6%; Score 1883.2; DB 6; Length 3147; Local Similarity 81.2%; Pred. No. 0; nes 2223; Conservative 0; Mismatches 508; Indels 5; Gaps 3;
ò		GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGCTCTCAG
Q		GAGCGGCCTCGGGGTACCATGGGGAGCGATCGGGCCCGCAAGGGCGGAGGGGGCCCGAAG 6
ð 8		105 GACTICGGCGCGGGACTCAAGTACAACTCCCGGCTAGAAACATGAATGGCTTTGAGGA 164
Sy Ph		165 GGTGTGGAGTTCCTGCGAACAATGCCAAGAAAGTGGAGAAGCGAGGCCCCAGGCG 224
ò		225 TGGGTGGTGGTGGCAGTGCTGTTCAGCTTCTTGGTCTCCTCCTCATGGCTGGC
qu		185 IGGGIGCIGCIGCAGCCGIGCTCATCGGCCTCCTCTTGGTCTTGGGGATCGGCTTC 244
S G		285 CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG 344
oy O		345 AGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACCAGAGTTTATC 404
λō		405 AGCCTGGCCAGCTGAAGGAGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTG 464
đ		365 AGCTIGGECAGCAAGGTGAAGGACGCGCTGGAGCTGCTACAGCGGAGTCCCATTCCTG 424

### ### ### ### ### ### ### ### ### ##	1545 ACGTGCAAAAACCAGTTCTGCAAGCCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGT 1604 1505 ACGTGCAAGAACACGAGCCCCTCTTCTGGGTCTGCGACAGTGTCAACGACTGT 1604 1605 ACGTGCAAGAACAGAGGGGTGCACTCTTCTGGGTCTCGCACAGTGTCAACTGTCCAAT 1664 1605 GGGAAGTGACGAGGGGTGCAGTGTCCTGCTGGGAGTTTCAAGTGTTCCAAT 1664 1605 GGGAAGTGTCTCCCTCAGAGGGGTGCAGTGTCCGGCCCAGACTTTCAAGTGTTCCAAT 1624 1605 GGGAAGTGTCTCCCTCAGAGCGAGAGGACACAGAGACACAGTGTTCCAAT 1624 1606 GGGAAGTGTCTCCCTCAGAGCGAAAGGAGAACACACAGTGTGGAAACACACAGTGTTCCAAT 1724 1616 GACGAGGCTTCATGTGACAGGTGAATGTGAAAGAGAACACACATACCAAATACCACACTGTACC 1744 1785 CAAATGGCCTCTGTCTGAGCAAACGCAAACACACACACAC		2025 GCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGACTACACGATGTGGACGSCC 2084 1985 GCACACTGCTACACACACACAGGATTCAGGTACTCAGACCCCCACGATGTGGACGCC 2044 2085 TTCCTGGGTCTGGTGGACCAGAGCAGTGCTCTGGGGGTGCAGGAGCTGAACGCC 2144 2045 TTCCTGGGCTTGCACGACCAGAGCAGTGCTCTGGGGGTGCAGGAGCTGAAGCTC 2144 2145 AAAACGTATCATCACCACCCATCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTG 2204 2145 AAAACGTATCATCACCACCCTTCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTG 2204 2105 AAACGCATCACCACCCCTTCTTCAATGATTTCACCTTCGACTATGACATGACGTGCTTG 2204	2205 CTGGAGCTGGAGAAGTACAGCACCGTCGTGGCGCCCATCTGCCTGC	2385 ACCTGTGAGGACCTCATGCCGCAGCAGATCACCCCACGAATGATGTGTGGGTTTCCTC 2444 2345 ACCTGCGGAGACCTCGCGCGCGCGCGCGCGCGCGCGCGCG
465 GETTCETRICACIONAGNAGITAMETRACTICACITAMETRACIONAGGAGGAGGATAMECCETRICACIONAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG	B & B & B & B & B & B & B & B & B & B &	6 6 6 6 6 6	8 6 8 6 8 6	8 8 8 8 8	6 8 6 8 6 8 6
465 GETTCETRICACIONAGNAGITAMETRACTICACITAMETRACIONAGGAGGAGGATAMECCETRICACIONAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG			4 4 4 8 4 4 4 8	. 8 4 4 6 6 9	
	GGTCCTACCACAAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTAC GGCCCTACCACAAGGAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTAC GGCCCTACCACACAAGGAGTCGGCTGTGACGCTTCAGCGAGGGCAGCGGTCATCGCCTAC TACTGGTTCAGCATCCCCCCACACCTGGCAGAGGCTTGATCGCGCATGGCT TACTGGTTCAGATTCAGCATCCCCCCACACTGGAGGCCGAGCGCGTCATGGCC GTGGAGCGAGTTCAACATTGCCACCCCGAGCACTGAAATCCTTCGTGCTAACA GAGGAGCGGTAATCATGCCCCCGAGGACCCGAGAATCCTTGTGTCAACA GAGGAGCGGTAATCATCCCCACGAGGCGCCTCTTGTACTACACACAC	AGCTTTGGCCTGCACGCCCGGGTGTGGAGCTGATGCGCTTCACCACGCCCGGCTTCCCT AACAGTCCCTACCCGGCGCATGCCCGCTGCCAGTGGGGCCTGCGGGGGACGCCGGCTTCCCT AACAGTCCCTACCCGGCTGCTGCTGCTGCGGGGGGGAGACGCCGGACTCC GTGCTGAGCCTCCAAGCTTTGATGTCGCTCCTGTGATGAGATGCACTCAC GTGCTGAGCCTCACCTTCCGAAGCTTTGATGTCGCTCCTGTGATGAGATGCACGTGAC GTGCTGAGCCTCACCTTCCGAAGCTTTGATGTCGCTCCTGTGATGAGCATGACGCTGAC GTGCTCAGGCCTCACCTTCCGAAGCTTTGATGTCGCTCCTGCATGCA	GGCACCTTCTCACCCTCCTACAACCTGACTTCCTCCCCCAGAACGTCTTCCTTGTC	TACTATCCAGGCCACTACCGGCCCAACATCAACTGGAATATCAAGGTGCCCAAC TACTACCCAGGCCACTACCCACCAACATTGACTGCAATGGAATATCAAGGTGCCCAAC TACTACCCAGGCCACTACCCACACATTGACTGCACATGGAACATTGAGGTGCCCAAC AACCGGAACGTGAAGGTGCGCTTCAAACTCTTCTATCTGGTGGACCCCAACGTACCGTG	CAGTITUTEGTGAGCAGCAACAGCAAGATTACAGTTCCATTCTGATTCTTAGATTCTTTAGATTCTTCTTAGATTCTTCTTAGATTCTTCTTAGATTCTTCTTAGATTCTTCTTAGATTCTTCTTAGATTCTTCTTAGATTCTTCTTAGATTCTTCTTAGATTCTTCTTTTCTTTTCATTCTTTAGATTCTTCTTTTCTTTTTTTT

585 GTGGAGCGAGTTGTAACATTGCCACCCCGAGCACGGGCACTGAAATCCTTCGTGCTAACA 644 2603 GAGGAGCGCGTAGTCATGCTGCCCCCGGGGCGCTCCCTGAAGTCCTTTGTGGTCACC 2544 645 TCTGTGGTGGCCTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGGACACACGCTGC 704 [ACCOGANGE CONTROLLE CONTRO	1545 ACCTGCAACGACCAACGAGGCCCTCTTCTGGGTCTGTGAACGCCGGCGACCAACCA
8 8 8 8 8	1 4 B 4 B 4 B 4 B 4 B 4 B 6 B 6 B 6 B 6 B	3
	PERSULT 12 LOCAL SEQUENCE 12 Etcm patent US 6451500. BERNHITTON Sequence 18 from patent US 6451500. ACCESSION SEQUENCE 10 1127269412 SCHORE ORGANICS SEQUENCE 10 1127269412 SCHORE DECAMA AR229712.1 G1:27269412 ACTIVITY DECAMA AR229712.1 G1:27269412 ACTIVITY DECAMA GAS CONTRIBUTION OF SECURAL ARABIT CONTRIBUTION OF SECURAL SECUR	Db 2783 AGCTGGCCAGCAGGTGAGGCGCTGAAGCTGCTGTACGCGGGTTCTCTG 2724 Qy 465 GGTCCCTACCACAAGGTGAAGTGGCTGCTCTCAGTGAGGGCGGGGTGCTTCTG 2724 Db 2723 GGCCCTACCACAAGGAGTCGGCTGTGACGCGAGGGGAGGGCTGATCGCTAC 2664 Qy 525 TACTGGTCAGAGTTCAGCTGCTACCACCAGGAGGGCGGGGGCGCATGGCT 584 Db 2663 TACTGGTCAGAGTTCAGCATCCCCCACACCTGGCAGAGGGTGATCGCCCATGGCT 584 2663 TACTGGTCTGAGTTCAGCATCCCCCACACCTGGTGGAGGGCCGAGGCCATGGCC 2604

PAT 31-AUG-2001

linear

the

Db ö 쉽 δ à

```
KKVEKHGPGRWYVLAAVLIGLLLVLGIGFLWHLQYRDVRVQKVENGYRETLPVNNV
KKVEKHGPGRWYVLAAVLIGLLLVLGIGFLWHLQYRDVRVQKVENGYMRITURENEV
DAYBENSNSTERVGLASKYKOAAKLIYSGVPECASPYHKESAYTAFSEGSVTATYMSERS
IPQHIVBEABRYWAERSKYWHLPPRARSIKSFWYTSYVAFPTDSKTYQRTQDNSCSFGI
HARGVELMRFTTPGFPDSPYPAHARCQMALRGDADSVLLTFRSFDLASCDERGSDLV
TYYNTLSPMEPHALVQLCGTYPPSYYNLTFHSSQWYLLITITITNTERPHPGFRAFFDD
PRMSSCGGRLRKAQGTPNSPYYPGHYPPNIDCTWNIEVPNNQHYKVSFKFFYLLEPGV
PAGTCPKDYYEINGREXCGERSQFVTSNSNKITYRRHSQWYTDTGFLAFYLSPGV
PAGTCPKDYYEINGREXCGERSQFVTSNSNKITYRRHSDQSYTDYGFLAFYLSPGV
PAGTCPKDYYEINGREXCGERSQFVTSNSNKITYRRHSDQSYTDYGFLAFYLSYDSS
DPCPGQFTCRTGRCIRKELRCDGWADCTDHSDELNCSCDAGHQFTCKNKFCKFLFWVC
DSYNDGGDDSDSGGSSPAPYTRCSNKKCLGRSQQCNGKKDOGGDGSDRSASCPFVVNYT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTKHTYRCLNGLCLSKGNPECDGKEDCSDGSDEKDCDCGLRSFTRQARVVGGTDADEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EWPWQVSLHALGQGHICGASLISPNMLVSAAHCYIDDRGFRYSDPTQWTAFLGLHDQS
SORSAFCVQRSRLKRIISHPFRDFFPPDIALLELERRARSSSRVRFLCLEDASHVFP
AGKAIWVTGWGHTQVGCTGALILOKGEIRVINQTTCRNLLPQQITPRMACVGFLSGGV
DSCQGDSGGPLSSVEADGRIFQAGVVSWGDGCAQRNKPGVYTRLPLFRDWIKENTGV"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              65 GACTTCGGCGCGGGACTCAAGTACAACTCCCGGCACGAGAAAGTGAATGGCTTGGAGGAA 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  285 CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Madison, E.L., Ong, E.O. and Yeh, J.C.

Nucleic acid molecules encoding transmembrane serine proteases,
encoded proteins and methods based thereon
Patent: WO 0157194-A 1 09-AUG-2001;
CORVAS INTERNATIONAL, INC. (US)
Location Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACTTCGGCGCGGGACTCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGGCTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5 chaccecercececraccarcegaccarcececececanescences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gecenegaerrecreceaercaacaacercaagaaceregaaaaacerrececegesee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      redericerecrecerecrearceecerecrecrerrerrerrecressarceecire
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60.6%; Score 1883.2; DB 6; Length 3147;
llarity 91.2%; Pred. No. 0;
Conservative 0; Mismatches 508; Indels 5;
                             413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'note="Nucleotide encoding MTSP1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note="unnamed protein product"
                                                                                                                                                                                                                                                            DNA
                        448 ACATACACTGTGAACTCAATCTCCAGGGCTCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             583 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /protein_id="CAC60377.1"
/db_xref="GI:15422496"
                                                                                                                                                                                                                                         Sequence 1 from Patent W00157194.
AX207897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="genomic_DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             958 g
                                                                                                                                                                                                                                                                                                                                                                                          AX207897.1 GI:15422495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             codon start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23. .>2589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        952 c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Simi
Matches 2223;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BASE COUNT
ORIGIN
                                                                                                                                                           RESULT 13
AX207897
                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                      1344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2624
1523 GGGAAGTGCCTCTCGAAAAGCCAGCAGTGCAATGGGAAGGACGACTGTGGGGACGGGTCC 1464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTATAGCAGCATGGACAGACAGCCGACCACAAACACCCCACAGGGATGCCCGACATGCACA 2684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       credeccadedeccacarerecederecricerearcreceaacrederecreerere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCACACTGCTACATCGATGACAGAATTCAGGTACTCAGACCCCACAGTGGACGGCC 1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ccastrorocaco-cerecadoristada de contra contra contra contra de co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTATAGGGCCGGG---GCCACCCAAATGTGTACACTGCGGGGCCACCCATCGTCCACC 507
                                                                                                                                                                                                                                                                                                                                                                                                         GATGGCTCCGATGAGAAAAACTGTGACTGTGGGCTGCGATCCTTTACCAAACAGGCTCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGGTTGGTGGCACGAATGCGGACGAGGGCGAGTGGCCCTGGCAGGTGAGCCTCCACGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1103 Trocresserriscacsaccasses de de conseser de conse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2445 AGTGGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1283 GTIGTIGGGGGCACGGATGCGGATGAGGGCGAGTGGCCCTGGCAGGTAAGCCTGCATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAACGTATCATCACCCACCCTTCCATGATTTCACCTTCGACTATGACATCGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTACCCATGTCTTCCCTGCTGGCAAGGCCATCTGGGTCACAGGCTGGGGGCACACAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCCTCCCATGTCTTCCCTGCCGGCAAGGCCATCTGGGTCACGGGCTGGGGGACACACCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             863 TATGGAGGCACTGGCGCGCTGATCCTGCAAAAGGGTGAGATCCGCGTCATCAACCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      803 ACCTGCGAGAACCTCCTGCCGCAGCAGATCACGCCGCGCATGATGTGCGTGGGCTTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATGGGCGAATGTTCCAGGCTGGTGTGTGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAAC
                                                                                                                                                                                                                                         1463 GACGAGGCCTCCTGCCCCAAGGTGAACGTCGTCACTTGTACCAAACACCACCTACCGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1343 GACGCCTCAGATGAGACTGCGACTGTGGGCTGGGGTCATTCACGAGACAGGCTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TICCTGGGTCTGCTGGACCAGGCGCAGTGCCTCTGGGGTGCAGGAGCTGAAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCCAGGCGTGTACACAAGGCTCCCTCTTTCGGGACTGGATCAAAGAGAACACTGGG
                                                                                                                                                                                                                                                                                                                                     CAAAATGGCCTCTGTCTGAGCAAGGGCAACCCTGAGTGTGATGGGAAGACGGACTGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTCATTGCTTTCAGGATGACAAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1043 AAGCGCATCATCTCCCACCCTTCTTCAATGACTTCACCTTCGACTATGACATCGCGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2325 GAGGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATGGGCGGATCTTCCAGGCCGGTGTGAGCTGGGGAGACGGCTGCGCTCAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2505
                                                                                                                                                      1725
                                                                                                                                                                                                                                                                                                                                     1785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1965
```

a ò d

qq δ g ò g

ò 임 à g à

δ

g ð a g à g à g à

ò

3; 104

164

64

224 184 284 244

g

셤

 δ

g

Š

B 65 B 65 B 65

8 6 8 6 8 6 8 6

· 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	6 6 6 6 6 6 6 6
	1185

CTGGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG CTGGTGTGGCATTTGCAGTACCGGGACGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG CTGGTGTGGCATTTGCAGTACCGGGACGTGCGTGTCCAGAAGGTCTTCAATGGCTACATG AGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCCCCACAGAGTTTATC AGGATCACAAATGAGAATTTTTGTGGATGCCTACGAGAACTCCACTCCACTGAGTTTTATA AGCCTGGCCAGCCAGGTGAAGGAGCGCTGAAGCTGCTGTACACGCGAGTCCCTGTCCTG AGCCTGGCCAGCAGGAGGCGCTGAAGCTGCTGTACACGCGGGGTCCCATTCCTG AGCCTGGCCAGCAAGAGGAGGCGCTGAAGCTGCTGTACACGGGGTCCCATTCCTG AGCCTGGCCAACAGAAGGACGCTGAACGCCTTCAAGGAGGCCACTTCCTG AGCCTGCCCTACCAAAGAAGAACGCCTGAACGCACATCGCCTACGAACGA	185 ACCORACIO CONTROLLO CO	1205 GGCACCTCCCAAGGACTACGTGGAGATACGAGAAATACTGCGGGAGAGAGA
8 6 8 6 6 6 6 6	6 E 6 E 6 E 6 E 6 E 6 E 6 E 6 E 6 E 6 E	4 & 4
		•
2465 GATGGGCGGATCTTCCAGGCCGGTGGTGAGCTGGGGAGCGCTCAGAGGAAC 2524 2565 AAGCCAGGCGTGACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGG 2624 2525 AAGCCAGGCGTGACAAAGGCTCCTTGTTTCGGGACTGGATCAAAGAGAACACTGGG 2584 2625 GTATAGCAGCGTGACAAACACCCACAAGATCGAACACACAC	RESULT 14 AX207945 AX207945 AX207945 BLOCKS Sequence 49 from Patent W00157194. NA linear PAT 31-AUG-2001 DETAINTION Sequence 49 from Patent W00157194. NA linear PAT 31-AUG-2001 DETAINTION AX207945 AX207945. IG:15422543 AX207945. IG:15422543 AX207945. IG:15422543 BLOCK SETTING Home aspiens BLOCK STATE HOME SEQUENCE CRATERIAL; Hominidae; Home. AUTHORS Madison, E.L., Ong.E.O. and Yeh.J.C. TITLE BLOCK STATE A 49 09-AUG-2001; FERTINES COURTAL PACE STATE A 49 09-AUG-2001; FERTINES COURTAL PACE STATE STATE STATE STATE SOURCE (AD 17796 STATE STATE STATE STATE STATE STATE SOURCE CORP. NO. 197145 STATE STATE SOURCE CORP. NO. 197145 STATE STATE STATE STATE SOURCE CORP. NO. 197145 STATE STATE SOURCE STATE STATE SOURCE STATE STATE SOURCE STATE STATE SOURCE STATE STA	

Db

δ

Dp

\$ B

\$ q &

8 5 A

6 A 6

90 A

qq

95 95 95 95 95

\$ 6 \$ 6 \$ 6 \$ \$

Db 2405 AGCGGCGGGGGGGGGGGTGATTCCGGGGGGCCCTGTCCAGCGTGGAGGC 2464 Qy 2505 GATGGGCGGGGCTGCTGCCGGGGGGGTGCCTGTCCAGGGGGC 2464 Db 2465 GATGGGCGGGTTCTCCAGGCTGGTGGTGAGTGCTGCGCTCAGGGGAC 2524 Qy 2565 AAGCCAGGCGTGTACACAGGCTGCTGGGTGGGTGGGTCCCTCAGAGGAAC 2524 Qy 2565 AAGCCAGGCGTGTACACAGGCTCCTGTTCGGGACTGGATCAAAGAGCACACTGGG 2624 Db 2525 AAGCCAGGCGTGTACACAAGGCTCCTGTTCGGGACTGGATCAAAGAGAACACTGGG 2634 Qy 2625 GTATAGCAGCATGGACAGACCGACCACAAAACGCTGGATCAAAGAGAACACTGGG 2641 Db 2585 GTATAGCAGCAGAGAACACCACAAAATGTGTACACACACA	RESULT 15 AF057145 LOCUS LOCUS LOCUS DEFINITION Homo sapiens serine protease TADG15 mRNA, complete cds. ACCESSION AF057145 BERNAM AF057145 AF057145 AF057145 AF057145 BERNAM AF057145 AF057145 AF057145 BERNAM AF057145 AF057145 AF057145 BERNAM AF067145 AF057145 AF067415 AF067415 AF067415 AF074041 AF074	/ db xref="Gill loas" #GGGGREDFGAGLKYNSRHEKVNGLEEGVEFLPVNNV KKVEKHGPGRWVVLAAVLGLLLATGIGFLVWHLQYRDYRVGKORGYRETTNERNY DAYENSUNSTFEFSCLASKKKDALKLLSGGELVWHLQYRDYRCYGROGYRETTNERNY DAYENSUNSTFEFSCLASKKKTALSGGELVWHLGYRDYRCYGRODNSCSFGL 1PQHLVEEAERVWALERVWALPPRARSLKSFVTVTSVVAFFTDSKTVGRTQDNSCSFGL HARGVFELMRFTPGPPDSPPAHARGOMALGADSVLSITFRSFPLASCDERGSDLV TVYNTLSPWEPHALVQLCGTYPPSYNLTHSSQNVLLITLITNTERRHFGFEAFFQL PRINSSGGAELKARGOTTNSPYTPGTPDEDEDED PROSCGGALGAGGGERGSPYGALGAGGGERGSDLASTCSTGFKVANKTSFRYDGEAGGGERGSDLASTCSTGGGGAGGGGGGGGGGGGGGGGGGGGGGGGGGGGG
13.65 TACACGGACACCGGGTTCCTAGCTGACTCCTCTCCACGACTCCAACGACCCGTGCCC	1725 GACGAGGCTTCATGTCACAGGGTGATGTCTTCTTGCACCAAATATACCACAGGTGC 1744	2145 AAACGTATCATCACCCCTTCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTG 2204

역G 장 역

8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6

1125 TACTATCCAGGCCACTACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAAC	138 138 147 148	45 GCGGACGGACCACAGCGAIGAGCTCAACTGCAGTTGCGACGCCGCCACCAGTTC 45 ACCTGCAAAAACCAGCGAIGAGCTCTTCTCGGGTCTGTGACGGCGCCGCCACCAGTTC 46 ACGTGCAAAAACCAGTTCTGCAAGCCCCTCTTCTGGGTCTGACGACGTGTGAACGACTGT 47 ACGTGCAAGAACACAGCTGCTGTGGGTCTGGGACGTGTGAACGACTGT 48 ACGTGCAAGAAGGCTGCAGCTGCTGCGGGTCTGCGGACGTTTCAAGTGTTCCAAT 49 ACGTGCAAGAAGGCTGCAGCTGCTGCTGCGGGACGTTTCCAAGTGTTCCAAT 40 ACGTGCAAGAAGGCTGCAGCTGCTGCTGCTGGGAGTTTCCAAGTGTTCCAAT 41 ACGTGCAAGAAGGCTGCAGCTGCTCCTGCTGGGAGTTTTCAAGTGTTCCAAT 41 ACGTGCAAGAAGGCTGCAAGCTCCTGCTGGGAGTTTTCCAAGTGTTCCAAT 41 ACGTGCAAGAAGGCTGCAAGCTCCTGCTGGGAGTTTTCCAAGTGTTCCAAT 41 ACGTGCAACAGAAGGCTGCAAGCTCCTGCTGGGAGTTTTCCAAT 42 ACGTGCAACAGAAGGACTGCAAGCTCCTGCTGGGAGTTTTCCAAT 43 ACGTGCAACAGAAGAACTGCAAGAACTGCAAGTGTTCCAAT 44 ACGTGCAACAGAAGAACTGCAAGAACTGCAACAGTGTTCCAAT 45 ACGTGCAACAGAAGAACTGCAAGAACTGCAACAGAACTGCAACAACAACAACAACAACAACAACAACAACAACAACAA		1725 GACGAGGCTTCATGTGACAGCGTGAATGTCGTCTTTGCACCAANTATACCTACGCTGC 1784	1845 GATGGCTCCGATGAGAAAACTGTGGCTGCGGATCCTTTACCAAACAGGCTCCC 1904	1965 CTGGGCCAGTTGTGTGGGGCCTCGCTCATCTCTCTGACTGGTCTCTGCA 2024	2085 TTCCTGGGTCTGCTGGACCAGAGCAAGCGCAGTGCTCTGGGGTGCAGGAGCTGAAGCTC 2144 2045 TTCCTGGGTCACGACCAGAGCCAGCGCCCTGGGGTGCAGGCGCAGGCTC 2104 2145 AAACGTATCATCACCACCCTTCCTTCAATGATTTCACCTTCGACTATGACTTGCCTTG 2204 2145 AAACGTATCATCACCCACCCTTCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTG 2204 2105 AAGGGCATCATCCCCACCCTTCTTCAATGATTTCACCTTCGACTATGACATCGCGTTG 2204 2205 CTGGAGCTGGAGGAGAGTCGGTGGATGGACTGCCTGCTTGCT
8 6 6 6 6 6 6	\$ 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	6 8 6 8 8	2 d 2 d	6 6 6	dd Qy dd dd	\$ 6 6 6 6 6 6 6	8 8 8 8
45 GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCCGAAGGCCGGAGGGGCTCTCAG 104	CTGGTGTGCCATTCCATTATCCGAATGTGCGGGTTCAAAAGTCTTCAATGGCCATCTG CTGGTGTGCCATTTCCATTACCGGACGTGCGGGTTCAAAGGCTTCAATGGCTACTG CTGGTGTGCCATTTGCAGTACCGGGACGTGCGTGCCACAAGGTCTTCAATGGCTACATG AGGATCACAAATGAGATCTTTTCTGGATGCCGTATGAGAACTCCACCTCCACACAGAGTTTATC	405 AGCCTGGCCAGCTGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCTG 464	525 TACTGGTCAGAGTTCAGCATCCCCCACAGAAGAGGTTGATCGCGCCATGGCT 584	645 TCTGTGGTGGCCTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGC 704	AACACTCCCTACCGGGGGATGCCGCTGCAGTGGGTCCTGGGGGGGACGCGGTTCCCCTACAGTGCGCTGCGGGGGGACGCCGGTTCCTCTGCGGGGGGACGCCGGCGGGGGACTCTTGAGTGCCTGCGGGGGGGG	CIGGICACCGIGIANGAIAGCCIGAGCCCCAIGGAACCCCACGCGCGCGCGCGCG	

qq	2165 (CTGGAGCTGGAGAACCGGCAGAGTACAGCTCCATGGTGCGGCCCCATCTGCCTGC	
Qγ	2265 (GCTACCCATGTCTTCCCTGCTGGCAAGGCCATCTGGGTCACAGGTGGGGGGCACAAAA 2324	
QQ	2225 (GCCTCCCATGTCTTCCCTGCCGGCAAGGCCATCTGGGTCACGGGTCGGGGAACACCCAG 2284	
δ	2325 (GAGGGGGGTACCGGAGCGCTGCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACC 2384	
qq	2285	TATGGAGGCACTGGCGCGCTGATCCTGCAAAAGGGTGAGATCCGCGTCATCAACCAGGCC 2344	
δλ	2385	ACCIGIGAGGACCTCAIGCCGCAGCAGAICACCCCCCCACGAAIGAIGIGIGGGGIITCCIC 2444	
ΟD	2345	ACCTGCGAGAACCTCCTGCCGCAGCAGATCACGCCGCGCATGATGTGCGTGGGGCTTCCTC 2404	
δ	2445	AGTGGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGACCCCTTGTCAAGCGCGGAGAAA 2504	
οp	2405	AGCGGCGTGTGTTTTTTTCCGGGGGACCCCTGTCTTTTTTTT	
δλ	2505	GATGGGCGAATGTTCCAGGCTGGTGTGAGCTGAGGTGAAGGCTGCGCTCAGAGGAAC 2564	
DÞ	2465 (GATGGGCGGATCTTCCAGGCCGGTGTGGTGGGGGAGACGGCTGCGCTCAGAGGAAC 2524	
ογ	2565	AAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGG 2624	
Ωb	2525	AAGCCAGGCGTGTACAAAGGCTCCCTCTGTTTCGGGACTGGATCAAAGAGAAAACTGGG 2584	
δγ	2625 (GTATAGCAGCATGGACAGACGGACCACAGAGACACCCACAGAGAATGCCCGACATGCACA 2684	
qq	2585 (GTATAGGGCCGGGGCCACCCAAATGTGTACACCTGCGGGCCACCCATCGTCCACC 2641	
ò	2685 (CCTGGATACAGAGAGACACTGACGACATTTATGCTGTGGCCTCCCCCCCC	
qa	2642	CCAGTGTGCACG-CCTGCAGGCTGGAGCTGGACTGCTGACTGCACCAGCGCC-CCAGA 2699	
ογ	2745	ACCCAGACTGTGAACTCCTTAGGACTCAGAGT 2780	
qa	2700	2700 ACATACACTGTGAACTCAATCTCCAGGGCTCCAAAT 2735	
Search co Job time	completed: : 11176	Search completed: February 21, 2004, 05:28:26 Job time : 11176 secs	

```
Human membrane-typ
Tumour antigen der
Human membrane-typ
Human membrane-typ
Human TADG-15 codi
Human TADG-15 anti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Epithin gene. Uni
Human matriptase c
                                                                                                                                February 21, 2004, 02:03:32; Search time 795 Seconds (without alignments) 10546.484 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                             N Geneseq 19Jun03:*

| SIDS1/gcgdata/geneseq/geneseqn-emb1/Na1980.DAT:*
| SIDS1/gcgdata/geneseq/geneseqn-emb1/Na1981.DAT:*
| SIDS1/gcgdata/geneseq/geneseqn-emb1/Na1982.DAT:*
| SIDS1/gcgdata/geneseq/geneseqn-emb1/Na1992.DAT:*
| SIDS1/gcgdata/geneseq/geneseqn-emb1/Na1992.DAT:*
| SIDS1/gcgdata/geneseq/geneseqn-emb1/Na1992.DAT:*
| SIDS1/gcgdata/geneseq/geneseqn-emb1/Na1992.DAT:*
| SIDS1/gcgdata/geneseq/geneseqn-emb1/Na1994.DAT:*
| SIDS1/gcgdata/geneseq/geneseqn-emb1/Na1994.DAT:*
| SIDS1/gcgdata/geneseq/geneseqn-emb1/Na1994.DAT:*
| SIDS1/gcgdata/geneseq/geneseqn-emb1/Na1999.DAT:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2000.DAT:*
/SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2001A.DAT:*
/SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2001B.DAT:*
/SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2002.DAT:*
/SIDS1/gcgdata/geneseq/geneseqn-emb1/NA2003.DAT:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                    5105512
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                  2552756 segs, 1349719017 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                   - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAD37039
AAA88493
AAF28099
AAX87815
AAD13113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAD13155
AAH23601
AAH23609
                                                                                                                                                                                                                                                                                                                           IDENTITY NUC Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query
Match Length D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3106
3149
3142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3147
3147
3147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60.8
60.5
60.6
60.6
60.6
60.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum DB seq
Maximum DB seq
                                                                                                                                                                                                                             Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1889.8
1884.8
1883.2
1883.2
1883.2
1883.2
                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                      OM nucleic
                                                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                  Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Result
No.
                                                                                                                                  Run on:
```

Type II transmembrare seri Transmembrane seri Transmembrane seri Transmembrane seri Human membrane-typ Human matriptase (Human SNC-19 codin Human CDNA differe DNA encoding novel Human matriptase o Human matriptase o Human matriptase o Ghuman natriptase o Ghuman natriptase chuman nambrane-typ Human EST (express Human EST (express	Pharmacological therapy; gene therapy; disease; epithin; gene; ds. fiers thin protein" ce flanking Neo insert in struct" ce flanking Neo insert in struct" ce flanking Neo insert in struct" ce flanking Neo insert in
AAL53444 AAL53445 ABZ58500 ABZ28450 ABZ22451 AAD47181 AAD47125 AAD47181 AAD47225 AAC79257	ALIGNMENTS pharmacolocisease; epi iers hin proteir e flanking truct" e deleted i
A A A A A A A A A A A A A A A A A A A	ALI Mal; phartic dise ualifier "Epithin quence f constru
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ar 3106 BP. Trry) animal; ph genetic dis con/Qualifie 330 a a cot = "Epithi 2465 " Sequence tting constr 2465 " Sequence i d " S q d " S q d " S q d " S q d " S q d " S q d " S q d " S q d " S q d
33 33 34 44 44 44 44 44 44 44	
00000000000000000000000000000000000000	nda . (f dul
18883.2 18883.2 18883.2 18883.2 18883.2 18883.2 18883.2 18883.2 18883.2 18883.2 18883.2 18883.2 19883.2 10550.2 10793.8 11759.2 11559.	37039, 37039, Aug-20 thin g nsgeni notype dentif c_feat c_feat
0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	RESULT 1 AAD37039 XX

υ

~

```
Local Similarity
WO200203787-A2
                                        Allen KD,
                                                                                                      Query Match
$$$CCCCCCCCCCCCCCCCCCCCCCCCCXX$$##$##$##$##$##$##$#$
```

The present invention relates to non-human transgenic animals preferably comprising disruption in target gene, e.g., tryptase gene, useful for identifying an agent that modulates expression or function of target Novel non-human transgenic animal, preferably transgenic mice Example 2; Fig 2A; 74pp; English 06-JUL-2000; 2000US-216251P. 06-JUL-2000; 2000US-216558P. 06-JUL-2000; 2000US-216768P. 10-JUL-2000; 2000US-217449P. 10-JUL-2000; 2000US-217450P. 07-AUG-2000; 2000US-223170P. 07-AUG-2000; 2000US-223172P. 07-AUG-2000; 2000US-223460P. 26-OCT-2000; 2000US-244311P. 27-UUL-2000; 2000US-221491P. 27-UUL-2000; 2000US-221669P. 27-UUL-2000; 2000US-221670P. 26-JUN-2001; 2001US-301217P 06-JUL-2001; 2001WO-US21427 Leviten MW; (DELT-) DELTAGEN INC. 2002-154853/20. P-PSDB; AAE23083 06-JUL-2000;

transgenic mice comprising disruption in target gene such as tryptase gene. The invention also relates to compositions and methods relating transgenic mice comprising disruption in target gene such as tryptase gene. The invention also relates to compositions and methods relating content of gene functions. The transgenic animals are useful for identifying an agent that modulates a phenotype associated with a disruption in tryptase genes or limilus and continuing factor protease-like genes by administering an agent to the transgenic animal and determining whether the agent modulates the continuing factor protease-like genes by administering an agent to the transgenic animal and determining whether the agent collating factor protease thymus to body weight, decreased thymus weight, decreased thymus to body weight ratio increased pre-pulse inhibition, significant decrease in their response latency to the hot continuits the expression, function or activity of the target gene are modulate the expression, function or activity of the target gene are useful for treating a disorder associated with a mutation in tryptase gene or in limilus clothing factor protease-like gene. The transgenic animals are useful for testing factor protease-like gene. The transgenic comminates are useful for therapies for human genetic diseases. They are useful to pharmaceuticals, therapies for human genetic diseases. They are useful to pharmaceuticals, therapies and interventions which may be effective in treating a disease or other phenotypic characteristics of the animal. invention The present sequence is exemplification of the

100.0%; Score 3106; DB 24; Length 3106; 100.0%; Pred. No. 0; Sequence 3106 BP; 692 A; 862 C; 897 G; 655 T; 0 other;

9 CATGGTAGACGGCTGCCCGGAGGGACCACGCGTCTGAGACCGGCGATCGGACCGCCAAAA CATGGTAGACGGCTGCCCGGAGGGACCACGCGTCTGAGACCGGCGATCGGACCGCCAAAA Н

Gaps

·,

0; Indels

0; Mismatches

Matches 3106; Conservative

ð d

1080 1020 1080 1020 540 360 360 420 420 480 480 900 009 099 720 720 780 780 840 840 900 900 ccandddiadcaarcddddccaaadcccdaaddddacrcrcaddacrrcddcdcdcddac ccarreaccccagaarecrecagaeacreagaeacaacaacaecrecaerrrreccerecare CGCATGCCCGCTGCCAGTGGGTCCTGCGGGGGACGCCGACTCTGTGCTGAGCCTCACCT receasecrirgarerecrecerereareacearecearedecareaceregereacererare GTGGCGGCTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCCTACTATCCAGGCCACT GIGGCGCCTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCCTACTATCCAGGCCACT TCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAGGGTGTGGAGTTCCTGC CTGCGAACAATGCCAAGAAAGTGGAGAAGCGAGGCCCCCAGGCGCTGGGTGCTGGTGG cricceaacaareccaagaaagricgagaaaagcgaggccccaggcccriggriggrigcriggrig ATTATCGGAATGTGCGGGTTCAAAAGTCTTCAATGGCCATCTGAGGATCACAAATGAGA ATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTGAGGATCACAAATGAGA TCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTTTATCAGCCTGGCCAGGG retriterida a receptada de a consecución de a consecue de consecue TGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTGGGTCCCTACCAAGA TGAAGGAGGCGCTGAAGCTGCTGTGTACAATGAAGTCCCTGTCCTGGGTCCCTACCACAGA AGTCGCCTGTAACTGCCTTCAGTGAGGCCAGTGTCATCGCCTACTACTACTGGTCAGAGTTCA AGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTACTACTACTGGTCAGAGTTCA GCATCCCCCCCACACTGAAGAGGTTGATCGCGCCATGGCTGTGGAGTGGTTGTAA GCATCCCCCCACACCTGGCAGAGAGTTGATCGCGCCCATGGCTGTGGAGCGAGTTGTAA CATTGCCACCCCGAGCACGGGCACTGAAATCCTTCGTGCTAACATCTGTGGTGGCCTTCC CATTGCCACCCCGAGCACGGGCACTGAAATCCTTCGTGCTAACATCTGTGGTGGCCTTCC CCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGCAGTTTTGCCCTGCATG CCCATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCTTCCCCAACAGTCCCTACCCGG cecanecocecnecoagressicoressesas de constante TCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGTGACCTGGTCACCGTGTATG 901 ATAGCCTGAGCCCCATGGAACCCCACGCTGTGGTGCGGCTGTGTGGCACCTTCTCACCCT CCTACAACCTGACTTTCCTCTCCTCCAGAACGTCTTCCTTGTCACGCTGATAACCAATA ceracaacergacerecereceasaacarerrecergacaegergaraaceaara CTGACCGGCGACATCCTGGCTTTGAGGCCACTTTCTTCCAGCTGCCCAAGATGAGCAGCT 301 481 541 901 961 1021 1081 1081 721 1021 361 361 421 421 481 541 661 781 781 841 841 196 61 121 181 181 241 301 601 601 661 721 121 241 g d 셤 셤 $\overset{\circ}{\sim}$ d ò 셤 ò 셤 ò g à g ò q à 셤 ö g ò 엄 ð 셤 ò 심 à d à d à à δ à

තු දුර

8 & B

OY 2281 CTGCTGGCAAGGCCATCTGGGTCACAGGCTGGGGGCACACAAAAGGGGAGGTACCGGAG 2340 	OY 2341 CGCTGATCCTGCAGAGGTGAGATCCCTGTCATCAACCAGACCACTGTGAGGACCTCZ 2400 Db · 2341 CGCTGATCCTGCAGAGGGGGAGATCCGTGTCATCAACCAGACCACCTGTGAGGACCTCZ 2400	QY 2401 TGCGGAGCAGATCACCCCACGAATGATGTGTGTGGGGGTTTCCTCAGTGGGGGTGTGGACT 2460 Db 2401 TGCCGCAGCAGATCACCCCACGAATGATGTGTGGGGTTTCCTCAGTGGGGTGTGGACT 2460	QY 2461 CCTGCCAGGGTGACTCTGGGCCCTTGTCAAGGGGGGAAAGATGGGCGAATGTTCC 2520 Db 2461 CCTGCCCAGGGTGACTCTGGTGGCCCCTTGTCAAGGGGGGGAGAAAGATGGGCGAATGTTCC 2520	QY 2521 AGGCTGGTGTGGGGTGAGGTGCGCTCAGAGGAACAAGCCAGGCGTGTACA 2580 Db	OY 2581 CAAGGCTCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGGGGTATAGCAGCATGGAC 2640 DD 2581 CAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGGGTATAGCAGCATGGAC 2640	QY 2641 AGACAGCGACACAAACACCCACAGGGATGCCCGACATGCACACCCGGATACAGGAGAG 2700 Db 2641 AGACAGCCGACACACACACACACACAGAGATGCCCGACATGCACACACGGATACAGGAGAG 2700	OY 2701 GAACACTGACGACATTTATGCTGTGGCCTCCCCCCCCAACACCAGACTGTGAACT 2760 Db 2701 GAACACTGACGACATTTATGCTGTGGCCTCCCCCCCCCAACACACAGAACACAGAACT 2760	QY 2761 GCATCCTTAGGACTCAGAGTTCTTCCAAAGTGGGACCCCCTCAAGAGTTGGAGAGAAC 2820 Db 2761 GCATCCTTAGGACTCAGAGTTCTTCCAAAGTGGGGACCCCCTCAAGAGTTGGAGAAGAAC 2820	OY 2821 TIGGGTGCTAGCGGCCCTGGGGGCAAGGTTTGATGGCAGCCTTCCCCTCTAGCC 2880 Db 2821 TIGCGTGCTAGCGGCCCAGCCTGGGGGCAAGGGTTTGATGGCAGCCTTCCCCCTCTAGCC 2880	QY 2881 CTGAGCTGGGTGAAGATGATGCTGCCGGAGAGCTGCTTCCAACTGTCATTGAGCTCCC 2940	OY 2941 GGGAGCCCTATGGGAGGAGGGCTCAGGGTCACTTTTCAGGAAGCGCCAGCCCTAGGA 3000 Db 2941 GGGAGCCCTATGGGAGGGCTCAGGGTCACTCTTTTCAGGAAGCGCCAGCCCTAGGA 3000	QY 3001 ACCCCAGAAAAGAGTAGCTACCTAAGGCTGAAATTGTTTTGCTGTTGCCAGGGGTGGGT	Qy 3061 TTGAGAGTAAAACATTTATTTGTTTTTAAAAAAAAAAAA	RESULT 2 AAA88493 ID AAA88493 standard; CDNA; 3149 BP.	XX AC AAA88493; XX DT 22-JAN-2001 (first entry)	DE Human matriptase cDNA. XX XX XX XW Matriptase, serine protease, human, breast cancer, pre-malignancy; XW actinic keratosis, leukoplakia, Barrett's epithelium; XW actimic metaplasia, ulcerative colitis, bowenoid papulosis,	adenomatous colorectal polyp; Qyerat erythroplasia; vulvar intraepithelial neoplasia; tumour; metastasis; ther
		1			· ·												
1141 ACCGGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAACAACCAGCAGAAGG 1200 1201 TGCGCTTCAAACTCTTCTATCTGGTGGACCCCAACGTACCAGTGGGCTCCTGCACCAAGG 1260 1201 TGCGCTTCAAACTCTTCTATCTGGTGGACCCCAACGTACCAGTGGGTTCTTCTAAACTTCTAAACTTGGTACCAAACTAACAAACTAAAACTTAAAAACTTAAAAAAAA	ACTATGTGGAGATCAACGGGAGAAGTACTGCGGTGAGAGGCCCCAGTTTGTGTGGGAAAAAAAA	GCAACAGCAGCAAGATTACAGTCCACTTCTGATTCTGATCAGTGTACAGGACACCGGGT 138	TCCTAGCTGAGTACCTCTCCTACGACTCCAACGACCCCAGGGATGTTCATGTGCA	AGACTGGACGGTCCATCCGAAAGAACTGCGCTGCGACTGGCCAGACTGCCGGATT	ATAGTCATGAGCGTTACTGCCGATGCATGCCACCCACTACAGTGCAGTAAAAACCAGT	TCTGCAAGCCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGTGGGGAAGTGACG	CCCTC 1	ATGTG	CTGTC	1801 TGAGCAAGGGCAACCCTGAGTGTGAAGAGGAAGACGGACTGTAGCGATGGCTCCGATGAGA 1860 	AAAACTGTGACTGTGGGTGCGATCCTTTACCAAACAGGCTCGCGTGGTTGGT	ATGCGGACGAGGGCGAGTGGCCTGGCAGGTCACGCCTGGGCCAGGCCACTGTAGGCCACTGTTGTAGGCCACTGTTGTAGGCCACTGTTGTAGGCCACTGTTGTAGGCCACTGCCAGGCCAGGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCAGGCAGGCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCAGGCCAGGCAGGCAGGCAGGCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCCAGGCCCAGGCCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCAGGCAGGCAGGCAGGCAGGCAGGCAGGCAGGCAGGCAGGCAGGCAGGCAGGCAGGCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCCAGGCCAGGCAGGCAGGCAGCA	TGTGTGGGGCCTCGCTCATCTCCTGACTGGCTGGTCTCTGCAGCTCATTGCTTTCAGG	2041 ATGACAAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCCTTCCTGGGTCTGCTGG 2100	2101 ACCAGAGCACAGCGCAGTGCCTCTGGGGGTGCAGAGCTGAAGCTCAAACGTATCATCACCC 2160	2161 ACCCTTCCTTCAATGATTTCACCTTGGACTATGACATCGCCTTGCTGGAGCTGGAGAAGT 2220 2161 ACCCTTCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTGCTGGAGAGCTGGAGAAGT 2220 2221 CGGTGGAGTACAACGTCGTGGGCGCCCATGTGCTGCTGCTAGCCATGTCTTCC 2280	

The present sequence is that of cDNA coding for the full-length corm (see AAB19521) of human matriptase, a trypsin-like protease. CDNA encoding a truncated form of matriptase is given in AAB8492. Bither form can be incorporated into a vector and used in a claimed method for making recombinant matriptase. The zymogen (inactive) form of matriptase is a single-chain protein. The active 2-chain form strongly interacts with fragments of a Kunitz-type serine protease inhibitor (hepatocyte growth factor activator inhibitor, matriptase is present mainly as the uncomplexed cancer cells, matriptase is present mainly as the uncomplexed form. Only the complexed matriptase in detected in human milk. The invention is circitated to a method of detecting a malignancy or a pre-malignant lesion in breast or other tissue by detecting the presence of incerted to a method of detecting a malignancy or a pre-malignant collecting in the tissue. The single- or 2-chain forms of matriptase in the tissue. The object is to inhibit tumour onset, tumour growth and metastasis. Malignancies and pre-malignant conditions characterised by expression of the zymogen or activated form of matriptase are treated by administering an inhibitor of matriptase, especially a Bowman-Birk inhibitor. The pre-malignant condition is atypical ductal hyperplasia of the besophagus, ulcerative collitis, adenomatous colorectal polyps, erythroplasia of the Queyrat, Bowen's disease, bowenoid papplosis, vulvar intrappithalian colorectal polyps, erythroplasia of the Queyrat, Bowen's disease, bowenoid papplosis, vulvar intrappithalian colorectal polyps, erythroplasia of the Queyrat, Bowen's disease, bowenoid papplosis, vulvar intrappithalian colorectal polyps, erythroplasia of the Queyrat, Bowen's disease, bowenoid papplosis, vulvar intrappithalian colorectal polyps, erythroplasia of the Queyrat, Bowen's disease, bowenoid papplosis, vulvar intrappithalian colorectal polyps, erythroplasia of the Queyrat, Bowen's disease, bowenoid papplosis, vulvar intrappithalian defendenc malignancies, premalignant and pathologic conditions in a comprises administering matriptase modulating agent -Wang S, Location/Qualifiers 36..2603 /*tag= c Dickson RB, Lin C, Johnson M, Claim 9; Fig 15; 116pp; English. 10-MAR-2000; 2000WO-US06111 99US-0124006 (GEOU) UNIV GEORGETOWN Treating malignancies, WPI; 2000-594268/56 P-PSDB; AAB19552. WO200053232-A1 Homo sapiens. 12-MAR-1999; subject, Key

Enyedy I;

SQ Sequence 3149 BP; 647 A; 959 C; 962 G; 581 T; 0 other;										
atch cal s cal s 2222: 2222 50 23 110 110 83 170	3149 BP; 647 A; 959 C; 962 G; 581 T; 0 other;	60.8%; Score 1889.8; DB 21; Length 3149;	o, Mismatches 504; Indels	GACCGCCAAAACCATGGGTAGCAATCGGGGCGGCAAGGCCGGGGGGGCTCTCAGGACTT 109	GGCCTCGGGGGACCATGGGGAGCGATCGGCCCGCAAGGGGGGGCCCCGAAGGTT 82	CGGCGCGGGACTCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGGGGGGTGT 169	CGCCGCGGACTCAACTACAACTCCCGGCACGAAAGTGAATGGCTTGGAGGAAGGCGT 142	GGAGTTCCTGCCTGCGAACAATGCCAAGAAGTGGAGAAGGGAGGG	GGAGTTCCTGCCAGTCAACAACGTCAAGAAGGTGGGAAGGCATGGCCCGGGGCGCTGGGT 202	
SQ Sequ Query M Best Lo Matches Qy Db Qy Qy Qy	SQ Sequence 3149	Query Match	Matches 2222; (Db 23 dgCc	110	Db 83 CGGC			

oy Dp	230 GGTGCTGGTGCTGTTCTGCTTCTCTCTTGCTCTCCCC	THECTCHCCTCANGECTGGCTTGCTGGT 289
VO da	290 GIGGCACITCCAITAICGGAAIGIGCGGGI 	GAGGAT 34 GAGGAT 32
, ç	50 CA	CAGCCT 40
8 &	323 CACAAATIGASAATITIGIGSATIGCCIACGAAATIGGAAGAAAAAAAAAAAAAAAAAAAA	AAGCCI 38 GGGTCC 46
da	383 GGCCAGCAAGGTGAAGGACGCGCTGAAGCT	
č	470 CTACCACAGAAGTCGGCTGTAACTGCCTT	CTACTG 52
qq	443 CTACCACAAGGAGTCGGCTGTGACGGCCTT	cracie 50
Çy Dp	530 GTCAGAGTTCAGCATCCCCCCACACCTGGC	GRAGAGGTTGATCGCGCCATGGCTGTGGA 589
ďζ	590 GCGAGTTGTAACATTGCCACCCCGAGCACG	ATCTGT 64
qq	563 GCGCGTAGTCATGCTGCCCCCGCGGGGCGCG	crcagr 62
yy du	650 GGTGGCCTTCCCCATTGACCCCAGAATGCT	CAGTTT 70
λŏ	710 TGCCCTGCATGCCCATGGTGCAGCAGTGAC	CAACAG 76
Db	683 TGGCCTGCACCCGCGTGTGGAGCTGAT	 GACAG
δ	770 TCCCTACCCGGCGCATGCCCGCTGCCAGTG	IGTGCT 82
QC	743 CCCTACCCGCTCATGCCCGCTGCCAGTG	AGTGCT 80
ò	830 GAGCCTCACCTTCCGAAGCTTTGATGTCGC	CCTGGT 88
qa	803 GAGCCTCACCTTCCGCAGCTTTGACCTTGC	CCTGGT 86
ολ	890 CACCGTGTATGATAGCCTGAGCCCCATGAA	TGGCAC 9
අුග	863 GACGGTGTACAACACCTTGAGCCCCCATGGA	TGGCAC 92
<i>ර්</i> ට 1	950 CITCICACCTCCTACAACCTGACTTTCCT	CACGCT 10
gg	923 CIACCTCCTCCTACAACCTGACCTTCCA	CACACT
oy Op	1010 GATAACCAATACTGACCGGCGACATCCTGGCTTTGAGGCCACTTTCTTCCAGCTT	TTTGAGGCCACTTTCTTCCAGCTGCCCAA 1069
δ	1070 GATGAGCAGCTGTGGCGGCTTTTGAGTGA	CTACTA
qq	43 GATGAGCAG	
δλ	30 TCCAGG	ACATGGAATATCAAGGTGCCCAACAACGG 1189
qu	CAGGCCA	ACATGGAACATTGAGTGCCCAACAACA 1162
ογ	90 GAACGTGAA	CTGGTGGACCCCAACGTACCAGTGGGCTC 124
q _Q	īĠŢ	chechedaecedededrecenecededa
λŏ	50 CTGCACCAAGGACTA	GAGAAGTACTGCGGTGAGAGGTCCCAGTT 130
qq	23 CTGCCCCAAGGACTA	
δλ	1310 TGTGGTGAGCAGCAACAGCAGCAAGATTACAGTCCACTTCCATTCTGATCACTCGTACAC	GICCACTICCATICIGAICACICGIACAC 1369

go Q

us-09-900-751-1.rng

g

à P à

 δ

q

₽ Ω

```
CTGGTGTGGCATTTGCCGGGACGTGTCCAGAAGGTCTTCAATGGCTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACTTCGGCGCGGGACTCAAGTACAACTCCCGGCACGAGAAAGTGAATGGCTTGGAGGAA 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTTTATC 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGATCACAAATGAGAATTTTGTGGATGCCTACGAGAACTCCAACTCCACTGAGTTTGTA 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACAGTCCCTACCCGGCGCATGCCCGCTGCCAGTGGGTCCTGCGGGGGGGCCCCGACTCT 824
                                                                            This is the nucleotide sequence of an isolated cDNA that codes for an extracellular serine protease, termed tumour antigen derived gene-15 protein (see AAV66712, that is overexpressed in breast and ovarian carcinomas. The TADG-15 gene can be used as a diagnostic and therapeutic target in ovarian carcinoma and other carcinomas isolated from ovarian carcinoma by PCR using primers directed to conserved areas of the serine protease family. The invention also provides: a vector that is capable of expressing DNA encoding TADG-15 protein, host cells selected from bacterial cells and method of detecting expression of TADG-15 colls. Capacially Escherichia coli), mammalian cells, plant cells and protein using a hybridisation probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rederecrescascerecrearcescerecretricarerrecressarcescrre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGCTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACTICGGCGCGCGCACTCAAGIACAACTCCCCGGCTAGAACAIGAATGGCTTTGAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u> Adecircacea de adada de acecerca a decircir a racea de cerando de aceca de controcirca</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTCCCTACCACAAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>racridericricadorricado arcedeado acencia a acencia a consecuencia a consecuencia a consecuencia a consecuencia de consecuencia a consecuencia de consecuenci</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGCGCCTCGGGGTACCATGGGGAGCGATCGGGCCCGCAAGGGCGGAGGGGCCCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTGTGGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAAGCGAGGCCCCAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCCTGGCCAGCCAGGTGAAGGAGGCGCTGAAGCTGCAATGAAGTCCTGTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCCCCTACCACAAGGAGTCGGCTGTGACGGCCTTCAGCGAGGGCAGCGTCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACTGGTCAGAGTTCAGCATCCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGGAGCGAGTTGTAACATTGCCACCCCGAGCACGGGCACTGAAATCCTTCGTGCTAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGGAGCGCGTAGTCATGCTGCCCCCCGCGGCGCGCTCCCTCGAAGTCCTTTGTGGTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTGTGGTGGCCTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGTTTTGCCCTGCATGCCCATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCTTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 3147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             508;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 60.6%; Score 1883.2; Best Local Similarity 81.2%; Pred. No. 0; Matches 2223; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 3147 BP; 654 A; 952 C; 958 G; 583
                             Fig 9; 71pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         645
                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ഗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         765
     X & X O O O O O O O O O O O X &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           吕
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                            2313
                                                                                                                                                                                                                                                                                 2287
                                                                                                                                                                                                                                                                                                                                         2373
                                                                                                                                                                                                                                                                                                                                                                                                                                                   2433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCAGAGGAACAAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAG 2613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCAGAGGAACAAGCCAGGCGTGTACACAAGGCTCCCTCTGTTTCGGGACTGGATCAAAG
AGCTGAAGCTCAACGTATCATCACCCCCTTCCTTCAATGATTTCACCTTCGACTATG
                                         AGCGCAGGCTCAAGCGCATCATCTCCCACCCTTCTTCAATGACTTCACCTTCGACTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACATCGCGCTGCTGGAGCTGGAGAAACCGGCAGAGTACAGCTCCATGGTGCGGCCCATCT
                                                                                                                                                                                                                         GCCTGCCTGATGCTACCCATGTCTTCCCTGCTGGCAAGGCCATCTGGGTCACAGGCTGGG
                                                                                                                                                                                                                                                                           GCCTGCCGGACGCCTCCCATGTCTTCCCTGCCGGCAAGGCCATCTGGGTCACGGGCTGGG
                                                                                                                                                                                                                                                                                                                                   GGCACACACAAAAGAGGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCAACCAGACCTGTGAGGACCTCATGCCGCAGCAGATCACCCCCACGAATGATGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGGTTTCCTCAGTGGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2408 resecritereksessessesses adakerterecekses rekredessesses eterererek
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCGCGGAGAAAGATGGGCGAATGTTCCAGGCTGGTGTGAGCTGGGGGTGAAGGCTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GOGTGGAGGCGGATGGGCGGATCTTCCAGGCCGGTGTGGTGAGCTGGGGAAGACGCTGCG
                                                                                                            ACATCGCCTTGCTGGAGCTGGAGAAGTCGGTGGAGTACAGCACCGTCGTGGCGCCCCATCT
                                                                                                                                                                                                                                                                                                                                                                                        GACACCCAGTATGGAGGCACTGGCGCCTGATCCTGCAAAAGGGTGAGATCCGCGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                derived gene-15; TADG-15; serine protease; human; ovary cancer; carcinoma; diagnosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A new extracellular serine protease for diagnosis of neoplastic disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2614 AGCACACTGGGGTATAGCAGCATGGACAGACA 2645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGAACACTGGGGTATAGGGGCCGGGGCACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tumour antigen derived gene-15 (TADG-15)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDNA; 3147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98US-0027337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US03436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23..2590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ĥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ARKANSAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tanimoto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-527418/44.
P-PSDB; AAY06671.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX87815 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   antigen
cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UYAR-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-FEB-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9942120-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-AUG-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            O'Brien TJ,
                                                  2108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2528
                                                                                                         2194
                                                                                                                                                                 2168
                                                                                                                                                                                                                      2254
                                                                                                                                                                                                                                                                           2228
                                                                                                                                                                                                                                                                                                                                   2314
                                                                                                                                                                                                                                                                                                                                                                                           2288
                                                                                                                                                                                                                                                                                                                                                                                                                                                   2374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX87815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             breast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX87815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
```

3;

g $\dot{\circ}$ g ò 쉽 ð g

ð g à 164

64

224 184 244 344 464

584

644 604

CTCATCTTCTGACTGGTGTCTGGA 2024 AAGTACTCAGACTACACGATGTGGACGGCC 2084 AAGGGTGAGATCCGTGTCATCAACCAGGCC 2384 TCTGGTGGCCCCTTGTCAAGCGCGGAGAA 2504 TTTATGCTGTGGCCTCCCCCCCAACAA 2744 AGTGCCTCTGGGGGTGCAGGGCTGAAGCTC 2144 ATCTGGGTCACGGCTGGGGACACCCAG 2284 ACGCCGCCATGATGTGCGTGGGCTTCCTC 2404 GAGTGGCCCTGGCAGGTGAGCCTCCACGCC 1964 Accercerceccenterecerear 2264 TCCATGGTGCGGCCCATCTGCCTGCCGGAC 2224 ACCCCACGAATGATGTGTGTGGGTTTCCTC 2444 AGCTGGGGTGAAGGCTGCGCTCAGAGGAAC 2564 TTTCGGGACTGGATCAAAGAGAACACTGGG 2584 AAACACCCACAGGGATGCCCGACATGCACA 2684 gracaccaccarcarcarcarcarcarcarcarc GATTICACCTICGACTATGACATCGCCTTG 2204 ATCTGGGTCACAGGCTGGGGGCACACAAA 2324 GTTCGGGACTGGATCAAAGAGCACACTGGG 2624 embrane-type serine protease; CAGAGT 2780 CCAAAT 2735 SP) 1 DNA.

```
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACTTCGGCGGGGACTCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAG 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGGTGGTGCTGGCAGCCGTGATCGGCCTCCTTGGTCTTGCTGGGGATCGGCTTC 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACTITCGCCGCGCGCTCCAAGTACAACTCCCGGCACGAAAGTGAATGCCTTGCAGGAA 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64
                                                                                                                                                                                                                                                             <u>-</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    compounds that modulate or inhibits its proteolytic activity and for formulating a medicament for treating neoplastic disease. MTSP and its corresponding nucleotides are useful in preventing or treating tumours or cancers such as lung carcinoma, colon adenocarcinoma and ovarian carcinoma, in diagnostics and in hybridisation assays. MTSP is useful as a diagnostic marker for tumour development, growth and/or progression and as immunogens to generate antibodies that specifically bind to it. MTSP DNA is useful in a yeast two-hybrid system and in gene therapy. The present sequence is a DNA encoding human MTSP1 protein (also called matriptase).
MTSP; protease domain; neoplastic disease; tumour; cancer; cytostatic; lung carcinoma; colon adenocarcinoma; ovarian carcinoma; gene therapy; matriptase; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGCTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGCGCCTCGGGGTACCATGGGGGGCGGATCGGGCCCCGCAAGGGCGGGAGGGGCCCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAGTGGAGAAGCGAGGCCCCAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCGTGGAGTTCCTGCCAGTCAACAACGTCAAGAAGGTGGAAAAGCATGGCCCGGGGGCGC
                                                                                                                                                                                                                          /*tag= a
/product= "Human transmembrane serine protease (MTSP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to transmembrane serine proteases and their corresponding nucleotides and the protease domain of a type-II membrane-type serine protease (MTSP). MTSP is useful for identifying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel single chain polypeptide comprising protease domain of type-II membrane-type serine protease or its catalytically active portion useful for treating and preventing cancer and tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1883.2; DB 22; Length 3147;
Pred. No. 0;
0; Mismatches 508; Indels 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 3147 BP; 654 A; 952 C; 958 G; 583 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 14; Page 191-195; 256pp; English
                                                                                                                                                                        Location/Qualifiers
23..2590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000US-0183542.
2000US-0213124.
2000US-0220970.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 60.6%;
Best Local Similarity 81.2%;
Matches 2223; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-SEP-2000; 2000US-0657986.
22-SEP-2000; 2000US-0234840.
                                                                                                                                                                                                                                                                                                                                                                                                                                2001WO-US03471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Yeh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INT INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ong EO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001-488877/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       P-PSDB; AAE06930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORVAS
                                                                                                                                                                                                                                                                                                             WO200157194-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-FEB-2000;
18-FEB-2000;
22-JUN-2000;
26-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                       02-FEB-2001;
                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Madison EL,
                                                                                                                                                                                                                                                                                                                                                                        09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (CORV-)
                                                                                                                   Ношо
                                                                                                                                                                        Key
```

g

8 8 8

g

g 4

ò

```
1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCACCTTCTCACCCTCCTACAACCTGACTTTCCTCTCCTCCCAGAACGTCTTCCTTGTC 1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          965 ACACTGATAACCAACACTGAGCGGCGGCATCCCGGCTTTGAGGCCACCTTCTTCTTCCAGCTG 1024
                                                                         404
                                                                                                                                              464
                                                                                                                                                                                424
                                                                                                                                                                                                                     524
                                                                                                                                                                                                                                                        484
                                                                                                                                                                                                                                                                                            584
                                                                                                                                                                                                                                                                                                                                 544
                                                                                                                                                                                                                                                                                                                                                                   644
                                                                                                                                                                                                                                                                                                                                                                                                                                          704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   964
 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                884
                                                                                                                                                                                                                                                                                                                                                                                                      GAGGAGCGCGTAGTCATGCTGCCCCCGGGGCGCGCTCCCTGAAGTCCTTTGTGGTCACC 604
CTGGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG
                                  credificacarringcagnaccescarcingcicasascercreaagercricaarescare
                                                                         AGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCACCACAGAGTTTATC
                                                                                                         305 AGGATCACAAATGAGAATTTTGTGGATGCCTACGAGAACTCCAACTCCACTGAGTTTGTA
                                                                                                                                                                                365 AGCCTGGCCAGCAAGGTGAAGGACGCGCTGAAGCTGCTGTACAGCGGAGTCCCATTCCTG
                                                                                                                                                                                                                                            425 GGCCCTACCACAAGGAGTCGGCTGTGACGCCTTCAGCGAGGCAGCGTCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                 GTGGAGCGAGTTGTAACATTGCCACCCCGAGCACGGGCCACTGAAATCCTTCGTGCTAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  665 Agcririgacciacacacacagararsaacraaracacriraacaacacacacacarracar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACAGCCCCTACCCCGCTCATGCCCGCTGCCAGTGGGCCCTGCGGGGGGGACGCCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGITICGICCACCAGCAACAAGAACAAGATCACAGTICGCITICCACITCAGAICAGTICC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1365 TACACGGACACCGGGGTTCCTAGCTGAGTACCTCCTACGACTCCAACGACCGTGCCCA
                                                                                                                                                                                                                     GGTCCCTACCACAAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTAC
                                                                                                                                                                                                                                                                                            TACTGGTCAGAGTTCAGCATCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCATGGCT
                                                                                                                                                                                                                                                                                                                         485 TACTGGTCTGAGTTCAGCATCCCGCAGCACCTGGTGGAGGAGGAGGCCGAGCGCGTCATGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             605 TCAGTGGTGGCTTTCCCCAACGGACTCCAAAACAGTACAGAGGACCCAGGACAACAACAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGTITIGCCCTGCATGCCCATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCTTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GIGCTGAGCCTCACCTTCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Graciagacercacerrececaeerrigacerrecerecrecaacaaeeecaeeae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGTCACCGTGTATGATAGCCTGAGCCCCATGGAACCCCCACGCTGTGGTGCGGCTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1025 CCTAGGATGAGCAGCTGTGGGGCCGCTTACGTAAAGCCCCAGGGGACATTCAACAGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1125 TACTATCCAGGCCACTACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCTCCTGCACCAAGGACTATGTGGAGATCAACGGGGGAGAAGTACTGCGGTGAGAGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGITIGIGGIGAGCAGCAGCAGCAGAAITACAGICCACITCCAITCIGAICACICG
                                                                                                                                              AGCCTGGCCAGCCAGGTGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTGTGGTGGCCTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 905 GGCACCTACCTCCTCCTACAACCTGACCTTCCACTCCTCCAGAACGTCCTCCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACGCTGATAACCAATACTGACCGGCGACATCCTGGCTTTGAGGCCACTTTCTTCCAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1085 TACTACCCAGGCCACTACCCACCCAACATTGACTGCACATGGAACATTGAGGTGCCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AACCGGAACGTGAAGGTGCGCTTCAAACTCTTCTATCTGGTGGACCCCCAACGTACCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        845 CIGGIGACGCIGIACAACACCCTGAGCCCCATGGAGCCCCACGCCCTGGTGCAGTTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCACCTGCCCCAAGGACTACGTGGAGATCAATGGGGAAAAAAACTGCGGAGAGAGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCAAGATGAGCAGCTGTGGCGGCTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCCC
                                245
                                                                                                                                                                                                                                                                                            525
                                                                                                                                                                                                                                                                                                                                                                                                        545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1265
                                                                       345
                                                                                                                                              405
                                                                                                                                                                                                                     465
                                                                                                                                                                                                                                                                                                                                                                   585
                                                                                                                                                                                                                                                                                                                                                                                                                                          645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1185
                        g
                                                                                                  d
                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                       à
                                                                                                                                          ò
                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                염
                                                                                                                                                                                                                                                                                      ઠ
                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
```

```
Example 6; Page 225-227; 256pp; English
                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
1865..2590
                                                                                                                                                                                                                                                             BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000US-0183542.
2000US-0213124.
2000US-0220970.
2000US-0657986.
                                                                                                                                                                                                                                                           AAD13155 standard; DNA; 3147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ë
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0179982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001WO-US03471
                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            partial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (CORV-) CORVAS INT INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ong EO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-488877/53.
P-PSDB; AAE06936.
                                                                                                                                                                                                                                                                                                                                                               lung carcinoma
matriptase; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200157194-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-FEB-2000; 22-JUN-2000; 26-JUL-2000; 26-32-SEP-2000; 22-SEP-2000; 22-SEP-2000; 2
                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EL,
                                                                                                                                                                                                                                                                                                   16-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-AUG-2001
                                                                                                                         2585
                      2505
                                           2465
                                                              2565
                                                                                                     2625
                                                                                                                                                                                                                                                                              AAD13155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Madison
                                                                                                                                                                                                                                                                                                                                                                                                                 Key
                                                                                                                                                                                                                                                 AAD13155
                                                                                                                                                                                                                                       RESULT
                                      임
                                                                            g
                                                                                                     ð
                                                                                                                      d
                                                                                                                                          à
                                                                                                                                                              셤
                                                                                                                                                                                                      엄
                     ð
                                                              ð
                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                            1544
                                                                                           1504
                                                                                                              1604
                                                                                                                                                       1664
                                                                                                                                                                                              1724
                                                                                                                                                                                                                                                                              1844
                                                                                                                                                                                                                                                                                                                     1904
                                                                                                                                                                                                                                                                                                                                          1864
                                                                                                                                                                                                                                                                                                                                                              1964
                                                                                                                                                                                                                                                                                                                                                                                                                                               2084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2264
2164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2445 AGTGGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGGGGGGAGAAA 2504
                                                                                                                                  ACGTGCAAGAACAAGTTCTGCAAGCCCCTCTTCTGGGTCTGCGACAGTGTGAACGACTGC 1564
                                                                                                                                                                                                                                                                                                                                                                                                                       1925 criegeccadescratereceserecricererereceaeregeregereres 1984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCACACTGCTACATCGATGACAGAGTTCAGGTACTCAGACCCCACGCAGTGGACGGCC 2044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCTCCCATGTCTTCCCTGCCGGCAAGGCCATCTGGGTCACGGGCTGGGGACACACCAGG 2284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Accreceacaaccrecrececacaearcacecececarearerecreerecerrecre 2404
                                                                                                                                                                                                                                                                                                                                                            GIGGTIGGIGGCACGAATGCGGACGAGGGCGAGTGGCCCTGGCAGGTGAGCCTCCACGCC
                                                1565 GGAGACAACAGCGACGAGGAGGGGGGGGTGTGTCCGGCCCAGACCTTCAGGTGTTCCAAT
                                                                                                                                                                                            GGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGACAACTGTGGAAGATGGGTCT
                                                                                                                                                                                                                                                                            CAAAATGGCCTCTGTCTGAGCAAGGGCAACCCTGAGTGTGATGGGAAGACGGACTGTAGC
                                                                                                                                                                                                                                                                                                                   GATGGCTCCGATGAGAAAAACTGTGACTGTGGGCTGCGATCCTTTACCAAACAGGCTCGC
                                                                                                            ACGIGCAAAAACCAGITCIGCAAGCCCCTCTICIGGGTCIGIGACAGGIGICAACGACTGI
                                                                                                                                                                                                                                                                                            TTCCTGGGCTTGCACGACCAGAGCCAGGGCAGGCCCCTGGGGTGCAGGAGCGCAGGCTC
                              GGGATGTTCATGTGCAAGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGG
                                                                                         GGGBACGGBAGTGACGAGGAGGCTGCAGCTGTCCTGCTGGGAGTTTCAAGTGTTCCAAT
                                                                                                                                                                                                                                     1805 GACGGCTCAGATGAGAAGGACTGCGACTGTGGGCTGCGTCATTCACGAGACAGGCTCGT
                                                                                                                                                                                                                                                                                                                                                                              1865 Grigiricaegedakogaracogaraagedeegaaraagedeagedagenaagedagen
                                                                                                                                                                                                                                                                                                                                                                                                    TTCCTGGGTCTGCTGGACCAGAGCAAGCGCAGTGCCTCTGGGGTGCAGGAGCTGAAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAACGTATCACCCACCCTTCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCGCATCATCTCCCACCCTTCTTCAATGACTTCACCTTCGACTATGACATCGCGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGAGCTGGAGAAGTCGGTGGAGTACAGCACCGTCGTGCGCCCCCATCTGCCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTACCCATGTCTTCCCTGCTGGCAAGGCCATCTGGGTCACAGGCTGGGGGGCACACAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2285 TATGGAGGCACTGGCGCGCTGATCCTGCAAAAGGGTGAGATCCGCGTCATCAACCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTCATTGCTTTCAGGATGACAAAATTTTCAAGTACTCAGACTACACGATGTGGACGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2325 GAGGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACC
                                                                                                                                                                                                                                   1725
          1325
                                                                                         1445
                                                                                                                                 1505
                                                                                                                                                    1605
                                                                                                                                                                                            1665
                                                                                                                                                                                                                1625
                                                                                                                                                                                                                                                         1685
                                                                                                                                                                                                                                                                                                                    1845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2345
                              1425
                                                 1385
                                                                     1485
                                                                                                             1545
                                                                                                                                                                                                                                                                           1785
                                                                                                                                                                                                                                                                                                                                                            1905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1985
                                                                                                                                                                                                                                                                                                                                                                                                                                           2025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2225
                                                g
                                                                    ð
                                                                                       qq
                                                                                                                             gg
                                                                                                                                                                       d
                                                                                                                                                                                          à
                                                                                                                                                                                                              g
                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                              입
                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
                           δ
                                                                                                           δ
                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
```

```
2464
                                                                                2564
                                                                                                                                                         2524
                                                                                                                                                                                                                                      2624
                                                                                                                                                                                                                                                                                                               2584
                                                                                                                                                                                                                                                                                                                                                                                            2684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2642 CCAGTGTGCACG-CCTGCAGGCTGGAGCTGGACCGCTGACTGCACCAGCGCCC-CCAGA 2699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human, transmembrane serine protease, membrane-type serine protease, MTSP; protease domain, neoplastic disease, tumour, cancer, cytostatic, lung carcinoma, colon adenocarcinoma, ovarian carcinoma, gene therapy;
2405 AGCGGCGCGTGGACTCCTGCCAGGTGATTCCGGGGGACCCCTGTCCAGCGTGGAGGCG
                                                                            GATGGGCGAATGTTCCAGGCTGGTGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTATAGGGGCCGGG----GCCACCCAAATGTGTACACCTGCGGGGCCACCCATCGTCCACC
                                                                                                                                                                                                                                  AAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGG
                                                                                                                                                                                                                                                                                                       2525 AAGCCAGGCGTGTACACAAGGCTCCCTCTGTTTCGGGACTGGATCAAAGAGAACACTGGG
                                                                                                                                                                                                                                                                                                                                                                                        GTATAGCAGCATGGACAGACAGCCGACCACAAACACCACAGGGATGCCCGGACATGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATGGGCGGATCTTCCAGGCCGGTGTGGTGAGCTGGGGAGACGGCTGCGCTCAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel single chain polypeptide comprising protease domain of type-II membrane-type serine protease or its catalytically active portion useful for treating and preventing cancer and tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human membrane-type serine protease (MTSP) 1 protease domain DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'product= "Human transmembrane serine protease (MTSP) 1 protease domain"
note= "CDS does not include start codon"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2745 ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2700 ACATACACTGTGAACTCAATCTCCAGGGCTCCAAAT 2735
```

us-09-900-751-1.rng

The invention relates to transmembrane serine proteases and their corresponding mucleotides and the protease domain of a type-II membrane-type serine protease (MTSP). MTSP is useful for identifying compounds that modulate or inhibits its proteolytic activity and for identifying formulating a medicament for treating neoplastic disease. MTSP and its corresponding nucleotides are useful in preventing or treating rounds or cancers such as lung carcinoma, colon adenocarcinoma and ovarian carcinoma, in diagnostic marker for tumours or assays mTSP is useful as a diagnostic marker for tumour development, growth and/or progression and as immunogens to generate antibodies that specifically bind to it. MTSP DNA is useful in a yeast two-hybrid system and in gene therapy. The present sequence is a DNA encoding protease domain of human MTSP1 protein (also called matriptase).

ò qq ò g ò ΩD g

₽ ద à g ð 임

ò

704 664 725 GACAGCCCTACCCGCTCATGCCGGTTGCCATGGGGCCCTGCGGGGGGGACGCCGATCTA 784 45 GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGCTCTCAG 104 CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG 344 464 GGTCCCTACCACAAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTAC 524 484 GTGGAGCGAGTTGTAACATTGCCACCCCGAGCACGGCACTGAAATCCTTCGTGCTAACA 644 705 AGTITIGCCCTGCATGCCCATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCTTCCCC 764 765 AACAGICCCIACCCGGCGCAIGCCCGCIGCCAGIGGGICCIGCGGGGGGACGCCGACICI 824 105 GACTICGGCGCGCGCACTCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAG 164 GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAAGCGAAGGCCCCCAGGCGC 224 125 GGCGTGGAGTTCCTGCCAGTCAACATCAAGAAGSTGGAAAAGCATGGCCCGGGGCGC 184 185 idadiderecidenadecerecidareacresicareridareriadoradadaneacine 244 creditoricaringcadiaccesacerecererecasaserenciaries respectivados 345 AGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTTTATC 404 305 AGGATCACAAATGAGAATTTTGTGGATGCCTACGAGAACTCCAACTCCACTGAGTTTGTA 364 TACTGGTCAGAGTTCAGCATCCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCATGGT 584 545 daddadcigiciandriang signification of the contra and contraction of the contraction o AGCTITIGGCCTGCACGCCCGCGGGGTGAGCTGATGCGCTTCACCACGCCCGGCTTCCCT 724 64 GGCCCCTACCACAAGGAGTCGGCTGTGACGGCCTTCAGCGAGGGCAGCGTCATCGCCTAC TCTGTGGGGCCTTCCCCATTGACCCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGC 605 readridentriceceaegaereceaaaaegaereegaegaegaegaegaegaegaege AGCCTGGCCAGCCAGGTGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTG 485 TACTGGTCTGAGTTCAGCATCCCGCAGCACCTGGTGGAGGAGGCCGAGCGCGTCATGGCC Gaps 22; Length 3147; 5; 0; Mismatches 508; Indels Sequence 3147 BP; 654 A; 952 C; 958 G; 583 T; 0 other; Score 1883.2; DB Pred. No. 0; Query Match
Best Local Similarity 81.2%;
Matches 2223; Conservative 525 582 645 665 405 465 425 65 165 225

ò g ð g ð 유 $\overset{\circ}{\circ}$ d ð à

25 GTGCTGAGCCTCACCTT	CCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGTGAC 884
9 89 5 44	
90	S GGCACCTTCTCACCCTCCTACAACCTGACTTTCCTCTCCCCAGAACGTCTTGTC 1004
100	S ACGUTATAACCAATACTGACCGGCGACATCCTGGCTTTGAGGCCACTTTCTTCCAGCTG 1064
106	CCCAAGATGAGCAGCTGTGGCGGCTTTTTGACTGACACCCCAAGGGACATTTAGCAGCCCC 1124
112	125 TACTATCCAGGCCACTACCGGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAAC 1184
118	5 PACCGGAACGTGAAGGTGCGCTTCAAACTCTTATCTGGTGGACCCCAAGGTACCAGG 1244
124	5 GGCTCCTGCACCAAGGACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGGGTCC 1304
130	
136	S TACACGGACACCGGGTTCCTAGCTGAGTACCTCTCCTACGACTCCAACGACCCGTGCCCA 1424
142	S GGGATGTICANGTGCAAGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGTGG 1484
148	
154	r r
160	5 GGGGACGGAAGTGACGAGGAGGCTGCAGCTGTCTGCTGGAGGGTTTCAAGTGTTCCAAT 16
166	GGGAAGTGTCTCCCTCAGAGCCAGAACTGTAATGGGAAGGAA
,	acceded transfer a constant of the constant of
178	
184	GATGGCTCCGATGAGAAAACTGTGAGGCTGCGGATCCTTTACCAAACAGGCTCGC 1904
, 01	າ ເຕັ

"Human TADG-15"

/*tag= a /product= ..2590

WO200129056-A1

2000WO-US29095 99US-0421213

20-OCT-2000; 20-OCT-1999;

26-APR-2001

(UYAR-) UNIV ARKANSAS

O'Brien TJ,

WPI; 2001-381031/40. P-PSDB; AAB98500.

Location/Qualifiers

sapiens

Homo Key

```
2264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2642 CCAGTGTGCACG-CCTGCAGGCTGGAGCCGCTGCTGCACCAGCGCCC-CCAGA 2699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCTCCCATGTCTTCCCTGCCGGCAAGGCCATCTGGGTCACGGGCTGGGGACACACCCAG 2284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2285 TATGGAGGCACTGGCGCCGCTGATCCTGCAAAAGGGTGAGATCCGCGTCATCAACCAGACC 2344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2445 AGTGGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCCCTTGTCAAGCGCGCGGAAAA 2504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2625 GIATAGCAGCATGGACAGACAGCCGACCACAAACACCCACAGGGATGCCCGACATGCACA 2684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2585 GTATAGGGGCCGGG---GCCACCCAAATGTGTACACCTGCGGGGCCACCCATCGTCCACC 2641
1865 GTTGTTGGGGGCACGGATGCGGATGAGGCCGAGTGGCCCTGGCAGGTAAGCCTGCATGCT
                                                                                                                                                                                                          creseccasescreces de contra de la contra de con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2345 ACCTGCGARACCTCCTGCCGCAGATCACGCCGCGCGCATGATGTGCGTGGGCTTCCTC
                                                                                                                           GCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCC
                                                                                                                                                                                                                                                                                                                                                                             GCACACTGCTACATCGATGACAGAGGATTCAGGTACTCAGACCCCCACGCAGTGGACGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTCCTGGGTCTGCTGGACCAGAGCGCAGTGCCTCTGGGGTGCAGGAGCTGAAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAACGTATCATCACCCCACCCTTCCATGATTTCACCTTCGACTATGACATCGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2105 AAGCGCATCATCTCCCACCCTTCTTCAATGACTTCACCTTCGACTATGACATCGCGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTACCCATGTCCCTGCTGGCAAGGCCATCTGGGTCACAGGCTGGGGGGCCACAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2325 GAGGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2405 AGCGGCGCGTGGACTCCTGCCAGGGTGATTCCGGGGGACCCCTGTCCAGCGTGGAGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATGGGCGAATGTTCCAGGCTGGTGTGAGCTGGGGTGAAGGCTGCAGCTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2465 GATGGGCGGATCTTCCAGGCCGGTGTGGTGAGCTGGGGAGACGGCTGCGCTCAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2525 AAGCCAGGCGTGTACACAAGGCTCCCTCTGTTTCGGGACTGGATCAAAGAGAACACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2745 ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2700 ACATACACTGTGAACTCAATCTCCAGGGCTCCAAAT 2735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2565
                                                                                                                                                                                                          1925
                                                                                                                                                                                                                                                                                              2025
                                                                                                                                                                                                                                                                                                                                                                             1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2505
                                                                                                                           1965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                       셤
                                                                                                                      ਨੇ
                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
```

```
104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         64
                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present sequence is the coding sequence for human tumour antigen-derived gene 15 (TADG-15) protein. TADG-15 is an extracellular serine protease. It was found that TADG-15 is over-expressed in ovarian tumours. TADG-15 protein or its fragments of 9-20 residues that lack TADG-15 protease activity are useful for vaccinating an individual against TADG-15, having, suspected of having or at risk of getting cancer. Furthermore, the TADG-15 gene can be used as a diagnostic or
                                                                                                                                                                                                                                                                                                                                              gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGGCTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACTTCGGCGCGGGGACTCAAGTACAACTCCCGGCTAGAAGAACATGAATGGCTTTGAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAGTCTTCAATGGCCATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          305 AGGATCACAAATGAGAATTTTGTGGATGCCTACGAGAACTCCAACTCCACTGAGTTTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        365 AGCCTGGCCAGCAAGGTGAAGGACGCGCTGAAGCTGCTGTACAGCGGGAGTCCCATTTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTCCCTACCACAAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGCGGCCTCGGGGTACCATGGGGAGCGATCGGGCCCGGAAGGGCGGGAGGGGCCCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAGCGAGGCCCCCAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCGTGGAGTTCCTGCCAGTCAACAACGTCAAGAAGGTGGAAAAGCATGGCCCCGGGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGGTGGTGCTGGCAGCCGTGCTGATCGGCCTCCTCTTGGTCTTGCTGGGGAATCGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          credichescarriceagraceagacereceagaegrericaagererrearegeracere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCCTGGCCAGCCAGGTGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5; Gaps
                                                                                                                                                                                                                                                                                                                                        Novel extracellular serine protease, termed tumor antigen-derived 15 protein overexpressed in carcinomas and DNA encoding it, for diagnosis, treatment, prevention of cancer, particularly breast,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60.6%; Score 1883.2; DB 22; Length 3147; 81.2%; Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches 508; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3147 BP; 654 A; 952 C; 958 G; 583 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 2; Fig 2; 130pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                therapeutic target in cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 81..2
Matches 2223; Conservative
                                                                                                                                                                                                                                                                                                                                                                                           ovarian cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        심
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ଚ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
```

Human; TADG-15; cytostatic; vaccine; ovarian tumour; cancer; tumour antigen-derived gene 15; extracellular serine protease; ds.

TADG-15 coding sequence.

Human

(first entry)

03-AUG-2001

AAH23601;

AAH23601 standard; DNA; 3147

RESULT 7 AAH23601

<u>ب</u>

us-09-900-751-1.rng

2964

224

284

2844

344

2784

464

404

2724

2664

524

2604

584

2544

644

2484

704

2424

764

2364

824

2304

944

884

2244

1004

2184 1064 1124

2124

1184

à g ò qq

d à qq

à

```
TACTACCCAGGCCACTACCCACCCAACATTGACTGCACATTGAGGTGCCCAAC 2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACCAGCATGTGAAGGTGAGCTTCAAATTCTTCTACTGCTGGAGCCCGGCGTGCCTGCG 1944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1245 GGCTCCTGCACCAAGGACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGAGGTCC 1304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       crestratedarinecagnacededecereceasaacencineaareacare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2843 AGGATCACAAATGAGAATTTTGTGGATGCCTACGAGAACTCCCAACTCCACTGAGTTTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        racrestrorsastrorscentes de la recesa de la constante del constante de la constante de la constante del constante del constante de la constante del constante del constante de la constante de la constante de la constante del constante de la constante de la
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAAGCGAGGCCCCAGGCGC
                                                                                         Gecercia de la contra del la contra de la contra de la contra de la contra del la contra de la contra del l
                                                                                                                                                                                                 AGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCCIGCCAGCCAGGIGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCAGTGGTGGCTTTCCCCACGGACTCCAAAACAGTACAGAGGACCCCAGGACAACAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCCAAGATGAGCAGCTGTGGCGGCTTTTTGAGTGACACCCCAAGGGACATTTAGCAGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTAGGATGAGCAGCTGTGGAGGCCGCTTACGTAAAGCCCAGGGGACATTCAACAGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1185 AACCGGAACGTGAAGGTGCGCTTCAAACTCTTCTATCTGGTGGACCCCAACGTACCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                   CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCCTGGCCAGCAAGGTGAAGGACGCGCTGAAGCTGCTGTACAGCGGAGTCCCATTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGTCCCTACCACAAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCCCCTACCACAAGGAGTCGGCTGTGACGGCCTTCAGCGAGGCCAGCGTCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACTGGTCAGAGTTCAGCATCCCCCCACACCTGGCAGAAGAGGGTTGATCGCGCCATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGGAGCGAGTTGTAACATTGCCACCCCGAGCACGGGCACTGAAATCCTTCGTGCTAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGGAGCGCGTAGTTGCTGCCCCCCGGGGCGCGCTCCCTGAAGTCCTTTGTGGTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTGTGGTGGCCTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTITTGCCCTGCATGCCCATGCTGCAGCAGTGACACGCTTCACTACCCCTGGCTTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCTITIGGCCTGCACGCCCGCGGTGTGGACCTGATGCGCTTCACCACGCCCGGCTTCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACAGTCCCTACCCGGCGCATGCCCGGTGCCAGTCCTGCGGGGGGGACGCCGACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2423 GACAGCCCTACCCCGCTCATGCCCGCTGCCAGTGGGCCCTGCGGGGGGGCCCCGACTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGTGACGGTGTACAACACCCTGAGCCCCATGGAGCCCCCACGCCCTGGTGGTTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACTATCCAGGCCACTACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGCTGAGCCTCACCTTCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTGGTCACCGTGTATGATAGCCTGAGCCCCATGGAACCCCCACGCTGTGGGGCGCTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCACCTACCTCCTCCTACACCTGACCTTCCACTCCTCCTCCTGCAGAACGTCCTGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACACTGATAACCAACACTGAGGGGGGGCATCCCGGCTTTGAGGCCCACCTTCTTCCAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2783
165
                                                                                              3023
                                                                                                                                                                                                 225
                                                                                                                                                                                                                                                                                                                                                                                                   285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2663
                                                                                                                                                                                                                                                                                               2963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2003
                                                                    Вþ
                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Dρ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ኞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ΩD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          පු
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                   ccadroraciación con consecuto de consecuto d
                          The present invention relates to human tumour antigen-derived gene 15 (TADG-15) protein and coding sequence (see AAH23601 and AAB98500).

TADG-15 is an extracellular serine protease. It was found that TADG-15 is over-expressed in ovarian tumours. TADG-15 protein or its fragments of 9-20 residues that lack TADG-15 protease activity are useful for at risk of getting an individual against TADG-15, having, suspected of having or at risk of getting cancer. Furthermore, the TADG-15 gene can be used as a diagnostic or therapeutic target in cancer. TADG-15 was cloned and expressed in the opposite orientation such that an antisense RNA molecule (the present sequence) was produced. The present sequence is useful for hybridising to the complementary RNA in a cell and thereby inhibiting translation of TADG-15 into protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ovarian tumour; cancer; human; antisense;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3143 GAGCGCCTCGGGGTACCATGGGGAGCGATCGGGCCCCGCAAGGGCGGAGGGGCCCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACTTCGGCGCGGGACTCAAGTACAACTCCCGGCTAGAACATGAATGGCTTTGAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGCTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel extracellular serine protease, termed tumor antigen-derived 15 protein overexpressed in carcinomas and DNA encoding it, for diagnosis, treatment, prevention of cancer, particularly breast,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 3147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 3147 BP; 583 A; 958 C; 952 G; 654 U; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5; cytostatic; vaccine; ovarian tumour; cancer
antigen-derived gene 15; serine protease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 22;
                                                                                                                                                                                                                           ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
                                                                                                                                                                                                                                                                                                                    2700 ACATACACTGTGAACTCAATCTCCAGGGCTCCAAAT 2735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            508;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1883.2;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Migmatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 8; Page 102-103; 130pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          standard; RNA; 3147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60.6%;
ilarity 81.2%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human TADG-15 antisense RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-OCT-2000; 2000WO-US29095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99US-0421213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tanimoto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (UYAR-) UNIV ARKANSAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-381031/40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200129056-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ovarian cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-0CT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Sim:
Matches 2223;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      O'Brien TJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3609/c
AAH23609 g
                                                                                                                        2642
                                                                                                                                                                                                                           2745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAH23609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAH23609/c
```

Db 863 TAIGGAGGCACTGGCGCTGAICCTGCAAAAGGGTGAGAICCGCGT	AY 2385 ACCTGTGAGGACCTCATGCGGCAGCAGATCACCCCACGAATGATGGCGCACGAGAACTGCGGCGCAGCAGCAGCAGCAGCAGCAGCAGAACACGCGCGCAGCA	OY 2445 AGTGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCTTGTC	OY 2505 GATGGGCBARGTTCCAGGCTGGTGTGAGCTGGGGTCAAGGCTG	Qy 2565 AAGCCAGGGGGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAA 	Oy 2625 GTATAGCAGCATGACAGACGACCACACACACACCCACAGGATG	QY 2685 CCTGGATACAGGAACACTGACGACATTTATGCTGTGGCCTCC	OY 2745 ACCCAGACTGTGAACTGCAICCTTAGGACTCAGGGT 2780 Db 448 ACATACACTGTGAACTCAATCTCCAGGGCTCCAAAT 413	RESULT 9 AAL53444 ID AAL53444 standard; DNA; 3147 BP.	XX AC AAL53444; XX DT 12-DEC-2002 (first entry)	Type II tra		À À	19-SEF-2002. 13-MAR-2002; 2002WO-US0790	13-MAR-2001; (CORV-) CORV?	PI Madison EL, Ong EO; XX DR WPI; 2002-732827/79. DR P-PSDB; AAO22929.	PT New transmembrane serine protease 7 (MTSP7) polypeptide f PT neoplastic diseases, monitoring tumor progress or therape PT effectiveness, or identifying MTSP7 modulators for treati PT cancers		CC The invention relates to a purified single or two-chain p CC which comprises the protease domain of a type-II membrane CC protease 7 (MTSP7) or its catalytically active portion. I CC comprising MTSP7 is useful for detecting or diagnosing a
		142				CTGCTGGGAGTTTCAAGTGTTCCAAT 1664	GGAAGGACAACTGTGGAGATGGGTCT 1724	NAMINIA CTACCGCIGC 1784	AGTGTGATGGGAAGACGGACTGTAGC 1844		IGGGGTCATTCACGAGACAGGCTCGT 1284 3GCCTGGCAGAGAGACTCCACGC 1964 ACCTTGCAGAGAGAGCTCCACGCC 1964 ACCTTGCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGA				CCCTGGGGTGCAGGAGCGCAGGCTC 1044 FCACCTTCGACTATGACATCGCCTTG 2204 FCACCTTCGACTATGACATCGCCTTG 2204 FCACCTTCGACTATGACATCGCCTTG 2204			HOLIGGGGACACACCAG 864 GGTGTCATCAACCAGACC 2384
1943 GGCACCTGCCCCAAGGACTACGTGGAGATCAATGGGGAGAAAT	1305 CAGITIGIGGIGAGCAGCACAGAGCAGAITACAGICCACI	1365 TACACGGACACCGGGTTCCTAGCTGAGTACCTCTCCTACGACT		1485 GCAGACTGCCGGATTATAGTGATGAGCGTTACTGCCGATGCCAATGCCACCCCCCCC	1545 ACGTGCAAAAACCAGTTCTGCAAGCCCCTCTTCTGGGTCTGTG	1605 GGGGACGGAAGTGACGAGGAGGGCTGCAGCTGTCTGCTGCTGGAAGAGAGAG	1665 GGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGATGGGTCT	1725 GACGAGGCTTCATGTGACAGCGTGAATGTCGTCTTGCACCAATATACCTACC	1785 CAAAATGGCCTCTGTCTGAGCAAGGCAACCCTGAGTGTGATGGGAAGACGGACTGTAGC	GATGGCTCCGATGAGAAAACTGTGACTGTGGGC	1343 GAUGGCTCGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG			TTCCTGGGTCTGCACCAGAGCAGCGCGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG	1103 TTCCTGGGGCTTGCACGACCAGCCAGCGCGCGCGCCCTGGGG 2145 AAACGTATCATCACCACCCTTCCTTCAATGATTTCACCTTCG 1043 AAGGGATCATCATCAACCCAACCCTTCATAATGATTAATGAATTTAATTAA	CTGGAGCTGGAGAAGTCGGTGGAGTACAGCACCG	2265 GCTACCCATGTCTTCCCTGCTGGCAAGGCCATCTGGGTCACAGGGTGGGGGCACACAAAA	
qq	oy Bp	S S S	oy Oy	S da	<i>\delta</i>	Qy	Qy Db	Qy Db	් රි	λō 42	oy da	3 & B	1 & 2	7 6 f	7	75 26	oy H	ČŽ Š

CAAGCCCCGAGAAA 2504 AAAGAGCACACTGGG 2624 ||||||||||||||| AAAGAGACACTGGG 564 recceacatecaca 2684 CCCCCCCACACA 2744 STCATCAACCAGACC 804 n polypeptide, ane-type serine . The polypeptide a neoplastic e for diagnosing apeutic ating tumors or SP7; malignancy; yen form; cancer; ID No 1.

us-09-900-751-1.rng

disease, a pre-malignant lesion, a malignancy or other pathologic condition in a subject. This polypeptide is also useful for monito tumour (e.g. tumuor of the breast, cervix, prostate, lung, ovary of colon) progress and/or therapeutic effectiveness. The inhibitor of polypeptide or the inhibitor of the polypeptide's zymogen form is for treating or preventing a neoplastic disease, or tumour initiat, growth or progression, or a (pre-)malignant condition. The polypeptide is also useful for identifying modulators of WISP7, may be used to treat cancers or tumours. This polymucleotide is also useful for identifying modulators of wISP7, serine protease t relating to the invention.

q δ

ð В ð 셤 ð g à ద à g $\overset{\circ}{\alpha}$ g à g

ß GTGGAGCGAGTTGTAACATTGCCACCCCGAGCACGGGCACTGAAATCCTTCGTGCTA GACTTCGGCGCGGGGACTCAAGTACAACTCCCGGCACGAGAAAGTGAATGGCTTGGA GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAAGTGGAAGCGAGGCCCCAAG GGTCCCTACCACAAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGC TACTGGTCAGAGTTCAGCATCCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCATC TACTGGTCTGAGTTCAGCATCCCGCAGCACCTGGTGGAGGAGGAGGAGGCGCGCGTCATC GIGCIGAGCCICACCITCCGAAGCITTGAIGICGCICCCTGTGAIGAGCAIGGCAGI 45 GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGCTC GACTTCGGCGCGGGACTCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGA CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAGTCTTCAATGGCCA crediterescarirecagnacesescerereceasasestricanesecna AGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTT AGGATCACAAATGAGAATTTTGTGGATGCCTACGAGAACTCCAACTCCACTGAGTT AGCCTGGCCAGCCAGGTGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGT GAGGAGCGCGTAGTCGTGCCCCCCCGGGGCGCGCTCCCTGAAGTCCTTTGTGGTC TCTGTGGTGGCCTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAG TCAGTGGTGGCTTTCCCCACGGACTCCAAAACAGTACAGAGGACCCAGGACAACAGCA AGCTTTGGCCTGCACGCCGCGGTGTGGAGCTGATGCGCTTCACCACGCCCTT AACAGTCCCTACCCGGCGCATGCCCGCTGCCAGTGGGTCCTGCGGGGGGACGCCGA(GACAGCCCTACCCCGCTCATGCCCGCTGCCAGTGGGCCCTGCGGGGAGAGACGCCGAC AGTITTGCCCTGCATGCCCATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCTT Score 1883.2; DB 24; Length 3147; Pred. No. 0; 5 508; Indels Sequence 3147 BP; 654 A; 952 C; 958 G; 583 T; 0 other; 0; Mismatches Query Match 60.6%; Best Local Similarity 81.2%; Matches 2223; Conservative 105 65 165 125 185 245 345 485 285 305 465 585 545 665 765 405 365 425 525 645 605 705 825 725 785

g

ð

g

ò

ДÜ

 $\overset{\circ}{\circ}$

a ò g ò

ð

toring	λŏ	885 CTGGTCACCGTGTATGATAGCCTGAGCCCCATGGAACCCCACGCTGTGGGGCTGTGT 944
of the s useful	qu	845 CIGGIGACGGIGIACAACACCCTGAGCCCCAIGGAGCCCCACGCCCTGGTGCAGTTGTGT 904
ation, eptide or 7, which '	& G	945 GGCACCTTCTCACCCTCCTACAACCTGACTTTCCTCTCCTCCCAGAACGTCTTCCTTGTC 1004
uence type	λō	
	අු	965 ACACTGATAACCAACACTGAGGGGGGTTTTGAGGCCACCTTCTTCCAGCTG 1024
	<u>ک</u> ۲۵	1065 CCCAAGATGAGCAGCTGTGGCGGCTTTTTGAGTGACACCCCAAGGGACATTAGCAGCCCC 1124
Gaps 3;	}	COLINGORIO GAGGOLIGI GGAGGOCOCOLI I ACGINAMOCOLICAGGGGACATTICAA (AGGCCOCO).
CTCAG 104	q _C	1085 TACTACCAGGCCACTACCCACAACATGGCAACATGGAACATGGAACATGGAACATGGAACATGGAACATGGAACATGGAACATGGAACATGGAACATGGAACATGGAACATGGAACATGGAACATTGACGACAACATGGAACATTGACGTGCCCAACATTGACTGCAACATGGAACATTGACGTGCCCAACATTGACTGCAACATGGAACATTGACGTGCCCAACATTGACGTGCCCAACATTGACGTGCAACATGGAACATTGACGTGCCAACATGGAACATTGACGAACATTGACGACAACATGGAACATTGACGACAACATGGAACATTGACGACAACATGAACAACATGGAACAACAACAACAACAACAACAACAACAACAACAACAA
	λζ	1185 AACCGGAACGTGAAGGTGCGCTTCAAACTCTTCTATCTGGTGGACCCCAACGTACCAGTG 1244
	qa	1145 AACCAGCATGTGAAGGTGAGCTTCAAATTCTTCTACCTGCGGGGCGCGGGGTGCCTGCG 1204
	ð.	1245 GGCTCCTGCACCAAGGACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGAGGTCC 1304
	셤	1205 GGCACCTGCCCCAAGGACTACGTGGAGATCGAGGAGAAAATACTGCGGAGAGAGGTCC 1264
	8	CAGTITGEGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG
3CTTC 244	ar i	
ATCTG 344	ò 4	1365 TACACGGACACCGGGTTCCTAGCTGAGTACCTCTCCTACGACTCCAACGACCCGTGCCCA 1424
ACATG 304	3 8	ANGRANGER CONTRACTOR TO THE TRACTOR OF THE TRACTOR
	7 A	1385 GGGCAGTTCACGTGCGCACGGGGGGGGGTGTATCCGGAAGGAGCTGCGTGGTTGGT
IIGIA 364 ICCIG 464	ò	1485 GCAGACTGCCCGGATTATAGTGATGGCGTTACTGCCGATGCAATGCCACCCAC
	qa	1445 GCCGACTGCACCGACCACGATGAGCTCAACTGCAGTTGCGACGCCGGCCACCACCAGTTC 1504
	8 6	1545 ACGTGCAAAAACCAGTTCTGCAAGCCCCTTTCTGGGTCTGTGACAGTGTCAACGACTGT 1604
	3	
CGCT 584 GGCC 544	дū	
	۷۶ ط	1665 GGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAACAGCTGTGGAGATGGGTCT 1724 1625 GGGAAGTGTTCCTCCAGAGCCAGAAGTGTAATGGGAACAACTGTGGAGATGGGTCT 1724 1625 GGGAAGTGTTCCAGAGCCAGAAGTGTAATGGAAAGAGAAAGAA
	ò	
SCTGC 704	: 4 3	GACGAGGCCTCCTGCCCAAGGTGAACGTCGTCACTTGTACCAAACAACACCTCCCGCTGC
	ò	1785 CABARTGGCCTCTGTCTGAGGGCAACCCTGAGTGTGATGGGAAGACGGACTGTAGC 1844
	qa	1745 CTCAATGGGCTCTGCTTGAGCCAACCCTGAGTGGACGGGAGGAGGACTGTAGC 1804
ACTCT 824	۶۵ و۲	1845 GATGGCTCCGATGAGAAAACTGTGACTGTGGGCTGCGATCCTTTACCAACAGGCTCGC 1904 1865 GATGCCTCCGATGAGAAAACTGTGACTGTGGGCTGCGATCCTTTACCAAACAGGCTCGC 1904 1865 GATGCCTCAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
ACTCA 784	łò	
FTGAC 884 SCGAC 844	d d	GTTGTTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG

```
2204
                                                                                                                                                    2104
                                                                                                                                                                                                                                          2264
                                                                                                                                                                                                                                                                      2224
                                                                                                                                                                                                                                                                                                   2324
                                                                                                                                                                                                                                                                                                                                                           2384
                                                                                                                                                                                                                                                                                                                                                                                                                                                 2404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2642 CCAGTGTGCACG-CCTGCAGGCTGGAGCTGGTGGACTGCACCACCAGCGCCC-CCAGA 2699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1925 chedeccadadanchecenechtercenentereceaeneereereinenen
                                                                                                                                                                         AAACGTATCATCACCCACCCTTCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTG
                                                       GCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCC
                                                                                                                                             Trecresecriscaesaccasaccascascaesaccecrassariscasasacce
                                                                                                                                                                                                                                                            GCTACCCATGTCTTCCCTGCTGGCAAGGCCATCTGGGTCACAGGCTGGGGCACACAAAA
                                                                                                                                                                                                                                                                                                                    2225 GCCTCCCATGTCTTCCCTGCCGGCAAGGCCATCTGGGTCACGGGCTGGGGACACACCCAG
                                                                                                                                                                                                                                                                                                                                                    GAGGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTGGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCCGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Adcescercercercereceaesrearrecesesescecererereaeseses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATGGGGGGATCTTCCAGGCCGGTGTGGTGAGCTGGGAACGCTGCTGGCAACGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTATAGGGGCCGGG---GCCACCCAATGTGTACACCTGCGGGGCCACCCATCGTCCACC
                                                                                                                   TTCTGGGTCTGCTGGACCAGGCGCAGTGCCTCTGGGGTGCAGGAGCTGAAGCTC
                                                                                                                                                                                                        AAGCGCATCATCTCCCACCCTTCTTCAATGACTTCACCTTCGACTATGACATCGCCTG
                                                                                                                                                                                                                                     CTGGAGCTGGAGAAGTCGGTGGAGTACAGCACCGTCGTGCGCCCCCATCTGCCTGAT
                                                                                                                                                                                                                                                                                                                                                                                  2285 TATGGAGGCACTGGCGCGCTGATCCTGCAAAGGGTGAGATCCGCGTCATCAACCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                               GATGGCGAATGTTCCAGGCTGGTGTGGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCCAGGCGTGTACACAAGGCTCCCTCTTTCGGGACTGGATCAAAGAGAACACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTATAGCAGCATGGACAGACAGCCGACACACACCCACAGGGATGCCCGACATGCACA
                                                                                    GCACACTGCTACATCGATGACAGGGATTCAGGTACTCAGACCCCACGCAGTGGACGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2700 ACATACACTGTGAACTCAATCTCCAGGGCTCCAAAT 2735
                                                                                    1985
                                                                                                                  2085
                                                                                                                                               2045
                                                                                                                                                                           2145
                                                                                                                                                                                                        2105
                                                                                                                                                                                                                                     2205
                                                                                                                                                                                                                                                                 2165
                                                                                                                                                                                                                                                                                                                                                      2325
                                                                                                                                                                                                                                                                                                                                                                                                                 2385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2745
                                                         2025
                                                                                                                                                                                                                                                                                             2265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2525
                                                                                                                                                                                                                                                                                                                                                                                                                                              2345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2625
                          q
                                                                                Db
                                                                                                                                                                                                     d
                                                                                                                                                                                                                                  ₽
                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                       合
                                                                                                                                                                                                                                                                                                                                                                               q
ð
                                                       ð
                                                                                                                ò
                                                                                                                                          ద
                                                                                                                                                                        \delta
                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

The invention relates to a purified single or two-chain polypeptide,
which comprises the protease domain of a type-II membrane-type serine
protease 7 (MTSP7) or its catalytically active portion. The polypeptide
comprising MTSP7 is useful for detecting or diagnosing a neoplastic
disease, a pre-malignant lesion, a malignancy or other pathologic
condition in a subject. This polypeptide is also useful for monitoring
tumour (e.g. tumuor of the breast, cervix, prostate, lung, ovary or
colon) progress and/or therapeutic effectiveness. The inhibitor of the
polypeptide or the inhibitor of the polypeptide's zymogen form is useful
for treating or preventing a neoplastic disease, or tumour initiation,
growth or progression, or a (pre-)malignant condition. The polypeptide or
polymucleotide is also useful for identifying modulators of MTSP7, which
may be used to treat cancers or tumours. This polymucleotide sequence
represents the coding DNA for a protein domain of the type-II membranetype serine protease I relating to the invention.

New transmembrane serine protease 7 (MTSP7) polypeptide for diagnosing neoplastic diseases, monitoring tumor progress or therapeutic effectiveness, or identifying MTSP7 modulators for treating tumors or

Disclosure; Page 174-176; 184pp; English

transmembrane serine protease 7 (MTSP7) polypeptide

13-MAR-2001; 2001US-275592P 13-MAR-2002; 2002WO-US07903

WO200272786-A2 19-SEP-2002 (CORV-) CORVAS INT INC

2002-732827/79 P-PSDB; AAO22930

```
CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAGTCTTCAATGGCCATCTG 344
                                                                                                                                                                                                                              GACTICGGCGCGCGCACTCAAGIACAACICCCGGCACGAGAAAGIGAAIGGCTIGGAGGAA 124
                                                                                                                                                                                                                                                                                                   GCCTGGAGTTCCTGCCAGTCAACAACGTCAAGAAGGTGGAAAAGCATGGCCCGGGGCGC 184
                                                                                                                                                                                                                                                                                                                                                                               TGGGTGGTGCTGGCAGCCGTGCTGATCGGCCTCCTTGGTCTTGCTGGGGATCGGCTTC 244
                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTCCCTACCACAAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTAC 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGGATCACAAATGAGAATTTTGTGGATGCCTACGAGAACTCCAACTCCACTGAGTTTGTA 364
                                                                                                                 GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGCTCTCAG
                                                                                                                                                                                       GACTICGGCGCGGGACTCCAAGIACACTCCCGGCTAGAGAACAIGAAIGGCTTTGAAGAG
                                                                                                                                                                                                                                                                                                                                          GAGCGGCCTCGGGGTACCATGGGGAGCGATCGGCCCCGCAAGGGCCGGAGGGGCCCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCCTGGCCAGCCAGGTGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTG
                                                                                                                                                                                                                                                                 GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAGCGAGGCCCCCAAGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCCTGGCCAGCAAGGTGAAGACGCCCTGAAGCTGCTGTACAGCGGAGTCCCATTCCTG
                                                                                Gaps
                                     Query Match 60.6%; Score 1883.2; DB 24; Length 3147; Best Local Similarity .81.2%; Pred. No. 0; Marches 2223; Conservative 0; Mismatches 508; Indels 5;
Sequence 3147 BP; 654 A; 952 C; 958 G; 583 T; 0 other;
                                                                                                               45
                                                                                                                                                  S
                                                                                                                                                                                       105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               305
                                                                                                                                                                                                                            65
                                                                                                                                                                                                                                                                 165
                                                                                                                                                                                                                                                                                                     125
                                                                                                                                                                                                                                                                                                                                          225
                                                                                                                                                                                                                                                                                                                                                                             185
                                                                                                                                                                                                                                                                                                                                                                                                                  285
                                                                                                                                                                                                                                                                                                                                                                                                                                                       245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        365
                                                                                                                                        g
                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                               ð
                                                                                                                                                                                     à
                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
```

104

64

164

224

284

404

464

Cytostatic; type-II membrane-type serine protease 7; MTSP7; malignancy; neoplastic disease; pre-malignant lesion; tumour; zymogen form; cancer; malignant; enzyme; gene; ds.

sapiens

Homo

XSX

XXXX

Type II transmembrane serine protease 1 domain DNA SEQ ID No 3

(first entry)

12-DEC-2002

AAL53445

NX X XB

BP.

AAL53445 standard; DNA; 3147

RESULT 10 AAL53445

8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8

1505 ACGTGCAAGAACTTCTGCAAGCCCCTCTTCTGGGTCTGCGACAGTGTGAACGACTGC 156 1605 GGGGACGAAGGAGGGCTGCAGCTGTCTGGGTCTTCCAAGTTTCAAGTGTTCCAAT 166 1605 GGGGACGAAGAGGGGTGCTGCTGCTGCGGGCCTGCTGCTGGGGGTTTCCAAT 167 1 1 1 1 1 1 1 1 1	1785 CAAAATGGCCTCTGTCTGAGCGAACCCTGAGTGTGATGGGAAGACGGACTGTAGC 184-	1965 CTGGGCCAGGGCCACTTGTGTGGGGCCTCGCTCATCTCTCCTGACTGGCTGG			
8 8 8 8 8 8	3 8 8 8 8	8 6 8 6 8 6	8 6 8 6 8 6	8 6 6 6 6	8 6 6 6 6
425 GGCCCTACCACAAGGAGTCGGCTGTGAGCGAGGGCAGCGTCATCGCCTAC 484 525 TACTGGTCACACACTCGCCTACCTGCCAGAGGGCAGCGTCATCGCCTAC 484 525 TACTGGTCAGATTCCACTTCCCCCCACCTGGTCGAAGAGGTTGATCGCCCTACGCT 584 485 TACTGGTCTGAGTTCCACCTCCCCCAGCAGCGCAGCGCGTTATCATCGTCATCGCC 544 585 GTGGAGCGGTTGTAACATTGCCAGCACCTGGTGAGAATCCTTTGTGGTCACC 544 585 GTGGAGCGGTAGTAACATTGCCCCCGGGGCGCCTCCTGAAATCCTTTGTGGTCACC 604 645 TCTGTGGTGGCTTCCCCATTGACCCAGAATGCTGCAGAAGACTCCTTTGTGGTCACC 604 645 TCTGTGGTGGCTTCCCCATTGACCCAGAATGCTGCAGAAGACTGC 704 646 TCTGTGGTGGTGCTTCCCCATTGACCTACAGAAGACTGC 704 647 TCTGTGGTGGTGCTTCCCCATTGACCTACAGAAGACTGC 704 648 TCTGTGGTGGTGCTTCCCCATTGACCTACAGAAGACTGC 704 649 TCTGTGGTGGTGCTTCCCCATTGACCTACAGAAGACTGC 704 641 TCTGTGGTGGTGCTTCCCATTGACCTACAGAAGACTGC 704 641 TCTGTGGTGGTGCTTCCCATTGACCTACAGAAGACTGC 704 641 TCTGTGGTGGTGCTTCCCATTGACCTACAGAAGACTGC 704 642 TCTGTGGTGGTGCTTCCCATTGACTACAGAAGACTGC 704 642 TCTGTGGTGGTGCTTCCCCATTGACTACAGAAGACTGC 704 643 TCTGTGGTGGTGCTACAGAAGAAGACTGC 704 644 TCTGTGGTGGTGCTACAGAAGAAGACTGC 704 645 TCTGTGGTGGTGCTACAGAAGAAGAAGACTGC 704 645 TCTGTGGTGGTGCTACAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAGAAG		CTGGTCACCGTGTATGATAGCCTGAGGCCCATGGAACCCCACGTGGGGGCGCTGTGTGTCTCTCGCCGTGGGGCGCTG	CCAAGATGAGCAGCGGCGGCTTTGAGGGCACCTTCTTCCAGCTG CCCAAGATGAGCGCGCTTTTTGAGTGACACCCAAGGGACATTTTGAGGCCCC		1325 TACACCGACACCGGCTTCTTTAGCTGAATACCTCTCCTACGACTCCCAGTGACCCCG 1384 1425 GGGATGTTCATGTGCAAGACTGGACGGTGCATCCCAAGAAGAACTGCGCTGCGACGCTGG 1484 1385 GGGCAGTTCACGTGCCGCACGGGGGGTGATCCGGAAGGACTGCGCTGTGATGGCTGG 1444 1485 GGCAGTTCACGGATTATAGTGATGAGGTTACTGCCGATGCAATGCCACCACCAGTTC 1544 1445 GCCGACTGCCGATTATAGTGATGAGCTTACTGCCGATGCAATGCCACCAGTTC 1544 1445 GCCGACTGCAACAGCGATTCTGCAATGCAACGCGCGCCCCAGTTC 1504 1545 ACGTGCAAAAAACCAGTTCTGCAAGGCTCTTCTGGGTCTGTGAACGCCGCCACCAGTTC 1504 1546 HILLIHIHIHIHIHIHIHIHIHIHIHIHIHIHIHIHIHI

장 역a 장 역a

ŏ

a y da da

```
'n
                             105
                                                                            165
                                                                                                     125
                                                                                                                              225
                                                                                                                                                     185
                                                                                                                                                                              285
                                                                                                                                                                                                       245
                                                                                                                                                                                                                              345
                                                                                                                                                                                                                                                                                                       365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1005
                                                                                                                                                                                                                                                                                405
                                                                                                                                                                                                                                                                                                                               465
                                                                                                                                                                                                                                                                                                                                                      425
                                                                                                                                                                                                                                                                                                                                                                                525
                                                                                                                                                                                                                                                                                                                                                                                                        485
                                                                                                                                                                                                                                                                                                                                                                                                                               585
                                                                                                                                                                                                                                                                                                                                                                                                                                                        545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          785
                           à
                                                    d
                                                                          ò
                                                                                                 셤
                                                                                                                                                    qq
                                                                                                                                                                             ò
                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                     g
                                                                                                                             ð
                                                                                                                                                                                                                              ₽
                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                     염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 챵
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        合
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
     2744
                       ccaergracace-ccrecaggcragagaccachraacracaccacacgccc-ccaga
 New type-II membrane-type serine protease 20 polypeptides, useful for preparing a medicament for diagnosing, treating or preventing cancer, dermatological disorders, aberrant wound repairs or crest syndromes -
                                                                                                                                                                                                                                     Human, transmembrane serine protease 1; MTSP1; MTSP20; enzyme;
cytostatic; dermatological; cardiant; vulnerary; ophthalmological;
gene therapy; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present sequence is that of cDNA encoding human type II transmembrane serine protease 1 (MTSP1). The invention relates to novel human type II transmembrane serine protein 20 (MTSP20) shows the protein 20 (MTSP20) and mulcie acids encoding it (see ABZ78449). Also claimed are methods of inhibiting tumour initiation, growth or progression by inhibiting MTSP20 activity, and of treating or progression by inhibiting MTSP20 activity, and of treating or progression by inhibiting associated with undesired and/or undesired angiogenesis or neovascularisation, especially undesired angiogenesis associated with solid neoplasms, vascular malformations and cardiovascular disorders, chronic inflammatory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60.6%; Score 1883.2; DB 25; Length 3147;
81.2%; Pred. No. 0;
artive 0; Mismatches 508; Indels 5; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               diseases, aberrant wound repairs, circulatory disorders, crest syndromes, dermatological disorders and ocular disorders using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 3147 BP; 654 A; 952 C; 958 G; 583 T; 0 other;
                                                                   ACATACACTGTGAACTCAATCTCCAGGGCTCCAAAT 2735
                                                ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
                                                                                                                                                                                                            Transmembrane serine protease 1 (MTSP1) cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 194-198; 216pp; English
                                                                                                                                                                                                                                                                                                              Location/Qualifiers
23..2590
/*tag= a
                                                                                                                                                                                                                                                                                                                                                    "MTSP1"
                                                                                                                                   ABZ58500 standard; cDNA; 3147 BP
                                                                                                                                                                                                                                                                                                                                                                                                                           03-JUL-2002, 2002WO-US21208
                                                                                                                                                                                                                                                                                                                                                                                                                                                  03-JUL-2001; 2001US-302939P.
                                                                                                                                                                                                                                                                                                                                        /*tag= a
/product=
                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CORV-) CORVAS INT INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          an inhibitor of MTSP20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2003-239207/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P-PSDB; ABP72376
                                                                                                                                                                                                                                                                                                                                                                         WO2003004681-A2
                                                                                                                                                                                                                                                                                        sapiens
                                                                                                                                                                                     13-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EL,
 2685
                       2642
                                              2745
                                                                       2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S:
Matches 2223
                                                                                                                                                            ABZ58500;
                                                                                                                                                                                                                                                                                      Homo
                                                                                                            RESULT 11
                                                                                                                       ABZ58500
                    qq
                                              \delta
                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

3.

Gape

., 2

508; Indels

Conservative

2223;

ò

Similarity

GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGGCTCTCAG 104

```
1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1004
                                                                                                                                                                           164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   704
                                                                  64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Grecreadecreacerreceaderrreacerrecerecraceaceaceaceaceac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACTICGGCGCGCGCACTCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                305 AGGATCACAAATGAGAATTTTGTGGATGCCTACGAGAACTCCAACTCCACTGAGTTTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TACTGGTCTGAGTTCAGCATCCCGCAGCACCTGGTGGAGGAGGCCGAGCGCGTCATGGCC
                                                                                                                                                                                                                                                                   65 GACTTCGGCGCGGGACTCAAGTACAACTCCCGGCACGAGAAGTGAATGGCTTGGAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCGTGGAGTTCCTGCCAGTCAACAACGAGAAGATGGAAAAAGCATGGCCCCGGGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             reseriesrescascesresresrescerecresresresresresassarcescrre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cregrerescarrrecaeracceesacereceaegacerercaegaaegrerreaaregeracare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGGAGCGAGTTGTAACATTGCCACCCCGAGCACGGGCACTGAAATCCTTCGTGCTAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTITIGCCCTGCATGCCCATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCTTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCCTGGCCAGCCAGGTGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Geccentaccacaageagregecrereacecerreaceaceaceaceaceaceaceare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGGAGCGCTAGTCATGCTGCCCCCGCGGCGCGCTCCCTGAAGTCCTTTGTGGTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rcagregregerrrcccacagacrecaaaacagracagagacccaggacaacaacagerge
                                                                                                                                                                                                                                                                                                                                                                             GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAAGCGAAGGCCCCAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCCTGGCCAGCAAGGTGAAGGACGCGCTGAAGCTGCTGTACAGCGGAGTCCCATTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGTCCCTACCACAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TACTGGTCAGAGTTCAGCATCCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTGTGGTGGCCTTCCCCCATTGACCCCCAGAATGCTGCAGAGGACTCAGGACAAACAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Adcriridacionaciones de de la respectación de la reconstruction de la rec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGCTGAGCCTCACCTTCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGTCACCGTGTATGATAGCCTGAGGCCCCATGGAACCCCCACGCTGTGGTGCGGCTGTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCACCTTCTCACCCTCCTACAACCTGACTTTCCTCCTCCCCAGAACGTCTTCCTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCACCTACCCTCCCTCCTACAACCTGCCTTCCACTCCTCCCAGAACGTCCTGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACGCTGATAACCAATACTGACCGGCGACATCCTGGCTTTGAGGCCACTTTCTTCCAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Acacteáriaaccaacaccaccarccceacriricaacaccarcrircrircaacric
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TACTATCCAGGCCACTACCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCAAGATGAGCAGCTGTGGCGGCTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
```

2384 2344 2464 2464 2564 2524 2624 2684

2584

Вb ò d δ 셤 ò g ò d à d δ a à g ਨੇ g ð a $\stackrel{\triangleright}{\partial}$ g ö 원 ð qq à 임 à d à Q ò g ò qq ò a a

```
GCTACCCATGTCTTCCCTGCTGGCAAGGCCATCTGGGGTCACAGGCTGGGGGCACACAAAA
                                                                                 GCTCCCATGTCTTCCCTGCCGGCAAGGCCATCTGGGTCACGGGCTGGGGACACACAG
                                                                                                                                                                     AGTGGGGGTGTGACTCCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGCGGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        2585 GTATAGGGGCCGGG---GCCACCCAAATGTGTACACCTGCGGGGGCCACCCATGGTCCACC
                                                                                                                                                                                                                                  GTATAGCAGCATGGACAGACAGCCGACCACAAACACCCCACAGGGATGCCCGACATGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2642 ccadraciaciacia conficial de a conficial de a conficial de confic
                                                                                                                                    GAGGGAGGTAACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACC
                                                                                                                                                                                                                                                                                GATGGGCGAATGTTCCAGGCTGGTGTGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human, transmembrane serine protease 1; MTSP1; MTSP20; enzyme;
cytostatic; dermatological; cardiant; vulnerary; ophthalmological;
gene therapy; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Transmembrane serine protease 1 (MTSP1) protein domain cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2700 ACATACACTGTGAACTCAATCTCCAGGGCTCCAAAT 2735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /product= "MTSP1 protease domain"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
1865..2590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABZ58501 standard; cDNA; 3147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               03-JUL-2001; 2001US-302939P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-JUL-2002; 2002WO-US21208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (CORV-) CORVAS INT INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-239207/23.
P-PSDB; ABP72377.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Madison EL, Ong EO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2003004681-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-JAN-2003
                                        2265
                                                                                    2225
                                                                                                                                    2325
                                                                                                                                                                                                                                  2385
                                                                                                                                                                                                                                                                                2345
                                                                                                                                                                                                                                                                                                                                2445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2745
                                                                                                                                                                                                                                                                                                                                                                                                                               2505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABZ58501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABZ58501
                                                                            원
                                                                                                                               δ
                                                                                                                                                                   g
                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ठे
                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
1085 TACTACCCAGGCCACTACCCACCCAACATTGACTGCACATGGAACATTGAGGTGCCCAAC 1144
                                                                                                                                                                                    1205 GGCaCCTGCCCCAAGGACTACGTGGAGAATCAATGGGGAGAAATACTGCGGAGAGAGGTCC 1264
                                                                                                                                                                                                                                                                                                                                                     1424
                                                                                                                                                                                                                                                                                                                                                                                                   1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1544
                                                                                                                                                                                                                                                       1364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGAGCTGGAGAAGTCGGTGGAGTACAGCACCGTCGTGGCCCCCATCTGCCTGAT 2264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1145 AACCAGCATGTAAAGTGAAGTTCAAATTCTTCTACCTGCTGGAGCCGGGGGGGCTGCG
                                                                                                                                                                                                                                                                                        1265 CAGTICGICACCAGCAACAGCAACAAGATCACTICGCIICCACTCAGAICAGICC
                                                                                                                                              GGCTCCTGCACCAAGGACTATGTGGAGATCAACGGGAGAGAAGTACTGCGGTGAGAGGTCC
                                                                                                                                                                                                                                                 CAGITITGIGGIGAGCAGCAACAGCAGCAAGAIIACAGICCACITCCAITCTGAICACTCG
                                                                                                                                                                                                                                                                                                                                             TACACGGACACCGGGTTCCTAGCTGAGTACCTCCTACGACTCCAACGACCCGTGCCCA
                                                                                                                                                                                                                                                                                                                                                                         1325 TACACCGACACGGCTTCTTAGCTGAATACCTCTCCTACGACTCCAGTGACCCCATGCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGATGTTCATGTGCAAGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1385 GGCAGTICACGIGCCGCACGGGCGGTGTATCCGGAAGGAGCTGCGCTGTATGGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1545 ACGTGCAAAAACCAGTTCTGCAAGCCCCTCTTCTGGGGTCTGTGACAGTGTCAACGACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1505 ACGTGCAAGAACAAGTTCTGCAAGCCCCTCTTCTGGGTCTGCGACAGTGTGAACGACTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGGACGGAAGTGACGAGGAGGCTGCAGCTGTCCTGCGAGTTTCAAGTGTTCCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAGACAACAGCGACGAGCAGGGGGGGGTGTTCTCCGGCCCAGACCTTCAGGTGTTCCAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGAAGTGTCTCCTCAGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGATGGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1625 dégaadrécerteredaaaadecadeadeaardegaadeacacrerededadeaeree
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACGAGGCCTCCTGCCCCAAGGTGAACGTCGTCACTTGTACCAAACACACCTACCGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAAAATGGCCTCTGTCTGAGCAAGGGCAACCCTGAGTGTGATGGGAAGACGGACTGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATGGCTCCGATGAGAAAACTGTGACTGTGGGCTGCGATCCTTTACCAAACAGGCTCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACGGCTCAGATGAGAAGGACTGCGACTGTGGGCTGCGGTCATTCACGAGACAGGCTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cridedecadededarerie de arecrete arcrete e a acrete a acrete a conservador
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCGCATCATCTCCACCCTTCTTCAATGACTTCACCTTCGACTATGACATCGCGCTG
                                                  AACCGGAACGTGAAGGTGCGCTTCAAACTCTTCTATCTGGTGGACCCCAACGTACCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGGTTGGTGGCACGAATGCGGACGAGGCGAGTGGCCCTGGCAGGTGAGCCTCCACGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCCTGGGTCTGCTGGACCAGAGCAAGCGCAGTGCCTCTGGGGTGCAGGAGCTGAAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Trecresectreeaccasecaseceasecececereseserseasececasecre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAACGTATCATCACCCACCCTTCCATCAATGATTTCACCTTCGACTATGACATCGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCACACTGCTACATCGATGACAGAGGATTCAGGTACTCAGACCCCACGCAGTGGACGGCC
                                                                                                                                              1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1445
                                                                                                                                                                                                                                            1305
                                                                                                                                                                                                                                                                                                                                             1365
                                                                                                                                                                                                                                                                                                                                                                                                                                         1425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2205
```

New type-II membrane-type serine protease 20 polypeptides, useful for preparing a medicament for diagnosing, treating or preventing cancer, dermatological disorders, aberrant wound repairs or crest syndromes - Disclosure; Page 200-202; 216pp; English.

The present sequence is that of cDNA encoding the protease domain of human type II transmembrane serine protease 1 (MTSP1) The invention relates to novel human type II transmembrane serine protein 20 (MTSP20) (see ABP72374) and nucleic acids encoding it (see ABE2599). Also claimed are methods of inhibiting tumour initiation, growth or progression by inhibiting MTSP20 activity, and of treating or preventing a disease or disorder associated with undesired and/or uncontrolled angiogenesis or neovascularisation, especially undesired angiogenesis associated with solid neoplasms, vascular malformations and cardiovascular disorders, chronic inflammatory diseases, aberrant wound repairs, circulatory disorders, crest syndromes, dermatological disorders and ocular disorders using an inhibitor of MTSP20.

Sequence 3147 BP; 654 A; 952 C; 958 G; 583 T; 0 other;

3; 104 164 124 224 184 284 304 AGGATCACAAAATGAGATCTTTGTGGATGCGTATGAGAACTCCACCACAGAGTTTATC 404 AGGATCACAAATGAGAATTTTGTGGATGCCTACGAGAACTCCAACTCCACTGAGTTTGTA 364 464 365 AGCCTGGCCAGCAAGGTGAAGGACGCGCTGAAGCTGCTGTACAGCGGAGTCCCATTCCTG 424 484 584 644 764 64 GGTCCCTACCACAAAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTAC 524 604 704 664 GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGCTCTCAG GACTTCGGCGCGGGACTCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAG GAGCGGCCTCGGGGTACCATGGGGAGCGATCGGGCCCCGCAAGGGCGGAGGGGCCCCGAAG GACTTCGGCGCGCGCACTCAAGTACACTCCCGGCACGAGAAGTGAATGCCTTGGAGGAA GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAAGGGAGGCCCCAAGGCG rédéridéridéridécadécérédridaricadecrécirerindericinadridadaredecrine CTGGTGTGGCCACTTCCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG GIGGAGCGAGTIGTAACATTGCCACCCCGAGCACGGGCACTGAAATCCTTCGTGCTAACA GGCGTGGAGTTCCTGCCAGTCAACAACGTCAAGAAGGTGGAAAAGCATGGCCCGGGGCGC GGCCCTACCACAAGGAGTCGGCTGTGACGGCCTTCAGCGAGGGCAGCGTCATCGCCTAC AGTTTTGCCCTGCATGCCCATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCTTCCCC AGCCTGGCCAGCCAGGTGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTG TACTGGTCTGAGTTCAGCATCCCGCAGCACCTGGTGGAGGGCCGAGGCGCGTCATGGCC GAGGAGCGCGTAGTCATGCTGCCCCCGCGGGCGCGCTCCCTGAAGTCCTTTGTGGTCACC TCTGTGGTGGCCTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGC 605 TCAGTGGTGGCTTTCCCCACGCACTCCAAACAGTACAGAGGACCCAGGACAACAACAGCTGC Gaps Length 3147; 5 Pred. No. 0; 0; Mismatches 508; Indels Query Match 60.6%; Score 1883.2; DB 25; Best Local Similarity 81.2%; Pred. No. 0; Matches 2223; Conservative 0; Mismatches 508; II 45 S 105 65 165 125 225 185 345 425 645 285 245 405 485 305 465 585 705 g qq 8 à δ 임 ₽ q õ g ò d ò q à υp ð d ò 엄 ð d ò

1004 1504 ACACTGATAACCAACACTGAGCGGCGCATCCCGGCTTTGAGGCCCACCTTCTTCAGCTG 1024 824 784 964 GGGGACGGAAGTGACGAGGACTGCAGCTGTCCTGCTGGGAGTTTCAAGTGTTCCAAT 1664 1724 1684 AGCTTTGGCCTGCACGCCGCGGGGTGTGGACTGATGCGCTTCACCACGCCCGGCTTCCCT GACAGCCCCTACCCCGCTCATGCCCGCTGCCAGTGGGCCCCTGCGGGGGGACGCCGACTCA AACAGTCCCTACCCGCCGCTGCCCGCTGCCAGTGGGTCCTGCGGGGGGACGCCGACTCT GTGCTGAGCCTCACCTTCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGTGAC Grecheagectreacerreceagetringacerrecereceagedagegede CTGGTCACCGTGTATGATAGCCTGAGCCCCATGGAACCCCACGCTGTGGTGCGGCTGTGT ciddigacdcigiacaacacccidadccccaigagccccacccidgigcairigidi GGCACCTTCTCACCCTCCTACAACCTGACTTTCCTCTCCTCCCAGAACGTCTTCCTTGTC GGCACCTACCCTCCCTACAACCTGACCTTCCACTCCTCCCAGAACGTCCTGCTCATC ACGCTGATAACCAATACTGACCGGCGACATCCTGGCTTTGAGGCCACTTTCTTCCAGCTG CCTAGGATGAGGAGCTGTGGAGGCCGCTTACGTAAAGCCCAGGGGACATTCAACAGCCCC 1085 TACTACCCAGGCCACTACCACCACTAGACTGCACATGGAACATTGAGGACATTGAGGACCAAC AACCGGAACGTGAAGGTGCGCTTCAAACTCTTCTTGGTGGACCCCCAACGTACCAGTG CAGITIGIGGIGAGCAGCAACAGCAAGAITACAGICCACTICCAITCIGAICACICG 1265 CAGTICGICGICACCAGCAACAGCAACAAGAICACAGIICGCIICCACICAGAICAGICC 1325 TACACCGACACCGGCTTCTTAGCTGAATACCTCCTACGACTCCAGTGACCCATGCCCG CCCAAGATGAGCAGCTGTGGCGGCTTTTTGAGTGACACCCCAAGGGACATTTAGCAGCCCC TACTATCCAGGCCACTACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAAC 1145 AACCAGCATGTGAAGGTGAGCTTCAAATTCTTCTACCTGCTGGAGCCCGGCGTGCCTGCG 1205 GGCACCTGCCCCAAGGACTACGTGGAGATCAATGGGGAGAAATACTGCGGAGAGAGGTCC decracificacericacerceses de constantes de co GGCTCCTGCACCAAGGACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGAGGTCC TACACGGACACCGGGTTCCTAGCTGAGTACCTCCTACGACTCCAACGACCCGTGCCCA GCAGACTGCCCGGATTATAGTGATGAGCGTTACTGCCGATGCAATGCCACCACCAGTTC GGGATGTTCATGTGCAAGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGG GCCGACTGCACCGACCACGATGAGCTCCAACTGCAGTTGCGACGCCGGCCACCAGTTC ACGTGCAAAAACCAGTTCTGCAAGCCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGT GGAGACAACAGCGACGAGGAGGTGCAGTTGTCCGGCCCAGACCTTCAGGTGTTCCAAT GGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGATGATGGGTCT GGGAAGTGCCTCTCGAAAAGCCAGCAGTGCAATGGGAAGGACGACTGTGGGGGACGGGTCC 1685 GACGAGGCCTCCTGCCCCAAGGTGAACGTCGTCACTTGTACCAAACACACCTACCGCTGC CAAAATGGCCTCTGTGTGTAGGACAAGGGCAACCCTGAGTGTGATGGGAAGACGGACTGTAGC 1745 CTCAATGGGCTCTGCTTGAGCAAGGCAACCCTGAGTGTGACGGAAGGAGGAGGACTGTAGC 1005 965 1185, 765 785 945 905 1065 1125 725 825 885 845 1305 1365 1425 1385 1485 1445 1545 1605 1565 1665 1625 1725 1785 ð q ð d 챵 8 ð Ωp ò q ò 셤 g 셤 δ 8 ద ð Š g ò g δ g 8 g d g à Š ПÞ à ਨੋ d à g

us-09-900-751-1.rng

```
2104
                                                                                                                                                                                                                                                                                                                              2204
                                                                                                                                                                                                                                                                                                                                                            2164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2285 TATGGAGGACTGGCGCGCTGATCCTGCAAAGGGTGAGATCCGCGTCATCAACCAGACC 2344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGAGAAA 2504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTATAGGGGCCGGG---GCCACCCAAATGTGTACACCTGCGGGGCCACCCATCGTCCACC 2641
GATGGCTCCGATGAGAAAACTGTGACTGTGGGCTGCGATCCTTTACCAAACAGGCTCGC
                                                                                                                                                                                                                     deacacreciaenreareareacagarreagareacacacacacacagases
                                                                                                                                                                                                                                                                                TTCCTGGGCTTGCACGACAGAGCCAGCGCACCCCTGGGGTGCAGGAGCGCAGGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2225 GCCTCCCATGTCTTCCCTGCCGCCAAGGCCATCTGGGTCACGGGGCTGGGGACACACCCAG
                                                                                            GTTGTTGGGGGCACGGATGCGGATGAGGCGAGTGGCCCTGGCAGGTAAGCCTGCATGCT
                                                                                                                                                                                                                                                                                                                       AAACGTATCACCCACCCTTCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTG
                                GACGGCTCAGATGAGAAGGACTGCGACTGTGCGCTGCGGTCATTCACGAGACAGGCTCGT
                                                            GTGGTTGGTGGCACGAATGCGGACGAGGCGAGTGGCCCTGGCAGGTGAGCCTCCACGCC
                                                                                                                          GCTCATTGCTTTCAGGATGACAAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCC
                                                                                                                                                                                                                                                       TTCCTGGGTCTGCTGGACCAGAGCGCAGTGCCTCTGGGGTGCAGGAGCTGAAGCTC
                                                                                                                                                                                                                                                                                                                                                                                     GCTACCCATGTCTTCCCTGCTGGCAAGGCCATCTGGGTCACAGGCTGGGGCACACAAAA
                                                                                                                                                                                                                                                                                                                                                    AAGCGCATCATCTCCACCCTTCTTCAATGACTTCACCTTCGACTATGACATCGCGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2325 GAGGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2345 ACCTGCGAGAACCTCCTGCCGCAGATCACGCCGCGCATGATGTGCGTGGGCTTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2405 AGCGGCGGCGTGGACTCCTGCCAGGGTGATTCCGGGGGACCCTGTCCAGCGTGAGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATGGGCGAATGTTCCAGGCTGGTGTGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTATAGCAGCATGGACAGACAGCCGACCACAACCCCCACAGGGATGCCCGACATGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ccadreriecace-cerecaeceridaadaceaececerecaecaececece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2465 GATGGGCGGATCTTCCAGGCCGGTGTGCTGAGCTGGGGAGACGCTGCGCTCAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGCCAGGCGTGTACACAAGGCTCCCTCTGTTTCGGGACTGGATCAAAGAGAAACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2700 ACATACACTGTGAACTCAATCTCCAGGGCTCCAAAT 2735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
1845
                              1805
                                                            1905
                                                                                          1865
                                                                                                                                                         1925
                                                                                                                                                                                                                                                                                                                     2145
                                                                                                                                                                                                                                                                                                                                                     2105
                                                                                                                            1965
                                                                                                                                                                                         2025
                                                                                                                                                                                                                                                       2085
                                                                                                                                                                                                                                                                                                                                                                                    2205
                                                                                                                                                                                                                                                                                                                                                                                                                    2165
                                                                                                                                                                                                                       1985
                                                                                                                                                                                                                                                                                       2045
                                                                                                                                                                                                                                                                                                                                                                                                                                                    2265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2745
ģ
                          g
                                                                                       qq
                                                                                                                         à
                                                                                                                                                    g
                                                                                                                                                                                       ò
                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                            8
                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ਨੋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
```

```
The present invention describes a polypeptide comprising a purified single or two chain polypeptide, which comprises the protease domain of a type-II membrane-type serine protease (MTSPIO) or its catcaltytically active portion, or a mutein of it, where up to 50 % of the amino acids are replaced with another amino acid, and the resulting polypeptide is a single chain or two chain polypeptide. MTSPIO has cativity of at least 1-10 % of the unmutated polypeptide. MTSPIO has cytostatic activity. The polypeptide containing the protease domain of the MTSPIO is useful for detecting a neoplastic disease, and for diagnosing the presence of a pre-malignant lesion, a malignancy, or other pathologic condition in a subject, or monitoring tumour (e.g. breast cervix, prostate, lung, ovary or colon tumour) progression and/or therapeutic effectiveness. An inhibitor of the polypeptide containing the protease domain of MTSPIO is useful for treating or preventing neoplastic disease in a mammal. An inhibitor of the activation cleavage of the zymogen form of the MTSPIO polypeptide is useful for inhibiting tumour containing the e.g. breast, cervix, prostate, lung, ovary or colon. The present sequence encodes human MTSPI (also known as matriptase), which is used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          165 GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAGTGGAGAAAGCGAAGGCCCCAGGCGC 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                65 GACTTCGGCGCGGGACTCGAGTACAACTCCCGGCACGAGAAAGTGAATGGCTTGGAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 45 GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCCGCAAGGCCGGAGGGGGCTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5 dagcigicorrogaganaccandogadecantegaccicadagaecagadagaececanae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                105 GACTICGGCGCGCGCACTCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAG
                  Human membrane-type serine protease MTSP1 encoding cDNA SEQ ID NO:1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                              membrane-type serine protease; neoplastic disease; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          membrane-type serine protease (MTSP10), or its muteins, useful for diagnosing neoplasms or malignancies, or for screening for MTSP10 inhibitors for treating such diseases
                                                       membrane-type serine protease; enzyme; MTSP10; cytostatic;
                                                                                                                                                                                                               /*tag= a
/product= "membrane-type serine protease MTSP1"
/note= "also known as matriptase"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 25; Length 3147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New polypeptides comprising the protease domain of a type-II
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              508; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3147 BP; 654 A; 952 C; 958 G; 583 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60.6%; Score 1883.2;
81.2%; Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 177-181; 198pp; English
                                                                                                                                                                          Location/Qualifiers
                                                                                            MTSP1; matriptase; gene; ss
                                                                                                                                                                                                                                                                                                                                                                                                             14-MAY-2001; 2001US-291001P
                                                                                                                                                                                                                                                                                                                                                                        14-MAY-2002; 2002WO-US15332
                                                                                                                                                                                               ..2590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 81.2
Matches 2223; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CORV-) CORVAS INT INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-129309/12.
P-PSDB; ABP56619.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Yeh J;
                                                                                                                                                                                                                                                                                         WO200292841-A2
                                                                                                                                     sapiens
                                                                                                                                                                                                                                                                                                                                  21-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Madison EL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                       Human;
                                                                                                                                     Homo
d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
```

3,

ABZ22450 standard; cDNA; 3147 BP

RESULT 13 ABZ22450 24-MAR-2003 (first entry)

ABZ22450

EXXXE

1205 GGCACCTGCCCCAAGGACTACGTGGAGATCAATGGGAGAAATACTGCGGAGAGAGGTCC 126. 1305 CAGTTTGTGGTGAGCAACAGCAAGAATTACAGTCCACTTCCATTCTGATCACTCG 136.	TTCCACTCAGATCAGTCC TCCAACGACCCGTGCCCA	GGGATGTTCATGTGCAAGACTGGACGTGCATCCGAAAGGAACTGCGCTGCGACCGCCCGGGCCTGCGGATGTTCATGTTCATGTGCCTGGGATGCGCTGCGAAGGAACTGCGCTGCGAAGAGAACTGCGAAACAGAGCTGCTGAAGAGAGCTGCTGAAGAGAGCTGCTGAAGAGAGCTGCTGATGATGATGATGATGATGATGATGATGATGATGATGAT	1485 GCAGACTGCCCGGATTATAGTGATGAGCGTTACTGCCGATGCAATGCCACCACCACCAGTTC 1544	1545 ACGTGCAAAAACCAGTTCTGCAAGCCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGT 1604	1605 GGGGACGGAAGTGACGAGGGCTGCAGCTGTCCTGCTGGGAGTTTCAAGTGTTCCAAT 1664	1665 GGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGATGGGTCT 1724	1725 GACGAGGCTTCATGACAGCGTGAATGTCGTCTTTGCACCAAATATACCTACC	1785 CAAAATGGCCTCTGTGTGAGCAACCCTGAGTGTGTGTGGAAGGAGGGGTGTAGC 1844 1745 CTCAATGGGCTCTGCTTGAGCAAGGGAACCCTGAGTGTGACGGGAAGGAGGACTGTAGC 1804	1845 GAIGGCTCCGATGAGAAAACTGTGACTGTGGGCTGCGATCCTTTACCAAACAGGCTCGC 1904	1905 GTGGTTGGTGGCAATGCGGACGAGGGGAATGGCCTGGCAGTGAGCCTCCACGC 1964	1965 CIGGGCCAGGGCCACTIGIGAGGCCTCGTCATCTCCTGACTGGCTGGTCTCTGGA 2024	2025 GCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGACTACACGATGTGGACGGC 2084	2085 TICCTGGGTCTGCAGCCAGGCAGGCAGTGCCTCTGGGGTGCAGAGCTGAGGTC 2144	2145 AAACGTATCATCACCCACCCTTCCTTCAATGATTTCACCTTGGACTATGACATCGCCTTG 2204	2205 CTGGAGCTGGAGAAGTCGGTGGAGGACCGTCGTGCGCCCCATCTGCCTGC	2265 GCTACCCATGTTCCTGCTGCAGAGGCCATCTGGGTCACAGGCTGGGGGCACACAAA 2324	2325 GAGGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACC 2384
d V	원 상 원	ර් <u>අ</u>	yo, da	oy Dp	8	දු පු	දුරු අ	oy O	o da	\$ g	ζγ QΩ	& 93	යි රි	65 dd	දි දි	\$ A	, QG
	<u> </u>		-								· · · · · ·						
		CIGGIGIGGCATTIGCAGIACCGGGACGIGCGIGICCAGAAGGICTICAAIGGCIACAIG 304 AGGAICACAAAIGAGAICITICIGGAIGCGIAIGAGAACICCACCICCACAGAGIITIAIC 404 		GGTCCCTACCACAAAAAGTCGGCTGTAACTGCCTTCAGTGAGGCAGTGTCATCGCCTAC 524	TACTGGTCAGAGTTCAGCATCCCCCACACCTGGCAGAGGGTTGATCGCGCCATGGCT 584									SCAGCCCC 			

90 90 PP

ò

qq

à dd ŏ Db ò a ð д

à

```
The present invention describes a polypeptide comprising a purified single or two chain polypeptide, which comprises the protease domain of a type-II membrane-type serine protease (MTSP10) or its catalytically cative portion, or a mutein of it, where up to 50 % of the amino acids are replaced with another amino acid, and the resulting polypeptide is a single chain or two chain polypeptide that has a catalytic activity of at least 1-10 % of the unmutated polypeptide. MTSP10 activity of a teast 1-10 % of the unmutated polypeptide. MTSP10 activity of the polypeptide containing the protease domain of the MTSP10 condition in a subject, or monitoring the protease domain of the protease condition in a subject, or monitoring tunour (e.g. breat, cervix, condition in a subject, or monitoring tunour (e.g. breat, cervix, ceffectiveness. An inhibitor of the polypeptide containing the protease domain of MTSP10 is useful for treating or preventing neoplastic disease to a mammal. An inhibitor of the activation cleavage of the zymogen containing the protease containing the mour cinitiation, growth or progression, or treating (pre-) malignant conditions of the e.g. breast, cervix, prostate, lung, ovary or colon. The present colon. The present colon the protease domain of the e.g. breast, cervix, prostate, lung, ovary or colon. The present 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                105 GACTICGGCGCGGGACTCAAGTACAACTCCCGGCTAGAAGAACAIGAAIGGCTTTGAGGAG 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 65 GACTTCGGCGCGGGACTCAAGTACAACTCCCGGCACGAGAAAGTGAATGGCTTGGAGGAA 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGGAGCGAGTTGTAACATTGCCACCCCGAGCACGGGCACTGAAATCCTTCGTGCTAACA 644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              45 GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGGCTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5 GAGCGGCCTCGGGGTACCATGGGGAGCGATCGGGCCCCCCAAGGGCGGGAGGGGGCCCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TACTGGTCTGAGTTCAGCATCCCGCAGCACCTGGTGGAGGCCGAGCGCGTCATGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAGCGAGGCCCCAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               125 GGCGTGGAGTTCCTGCCAGTCAACAACGTCAAGAAGGTGGAAAAGCATGGCCCGGGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGTGTGGCATTTGCAGTACCGGGACGTGCGTGTCCAGAGGTCTTCAATGGCTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGATCACAAATGAGAATTTTGTGGATGCCTACGAGAACTCCAACTCCACTGAGTTTGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTCCCTACCACAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Geccernacia de la contra dela contra de la contra dela contra de la contra de la contra de la contra de la contra dela contra de la contra dela contra del la contra de la contra del la 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 605 TCAGTGGTGGCTTTCCCCACGGACTCCAAACAGTACAGAGGACCCAGGACAACAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             185 rederiegrecaecegecaecrearesecrecicirerresidaneseanceserre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCCTGGCCAGCCAGGTGAAGGAGGCGCTGAAGCTGTACAATGAAGTCCCTGTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TACTGGTCAGAGTTCAGCATCCCCCACACCTGGCAGAAGAGGGTTGATCGCGCCATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOTGTGGTGGCCTTCCCCATTGACCCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          matriptase), which is used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 25; Length 3147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches 508; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 3147 BP; 654 A; 952 C; 958 G; 583 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 60.6%; Score 1883.2;
Best Local Similarity 81.2%; Pred. No. 0;
Matches 2223; Conservative 0; Mismatches
        Example 1; Page 183-185; 198pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            585
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               а
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                 GTATAGGGGCGGG---GCCACCCAATGTGTACACCTGCGGGGCCACCCATGGTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ccaererecace-cerecaecresaecresaececresaececececececececececece
                        AGTGGGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGGAGAAA
                                                                                                                                                                                                                                           AGCGGCGGCGTGGACTCCTGCCAGGGTGATTCCGGGGGACCCCTGTCCAGCGTGGAGGCG
                                                                                                                                                                                                                                                                                                                            GATGGGCGAATGTTCCAGGCTGGTGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGCCAGGCGTGTACACAAGGCTCCCTCTGTTTCGGGACTGGATCAAAGAGAACACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTATAGCAGCATGGACAGACAGCCGACCACAACACCCACAGGGATGCCCGACATGCACA
                                                                                                                                                                                                                                                                                                                                                                                                     GATGGGCGGATCTTCCAGGCCGGTGTGGTGAGCTGGGGAGACGCTGCGCTCAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New polypeptides comprising the protease domain of a type-II membrane-type serine protease (MTSP10), or its muteins, useful for diagnosing neoplasms or malignancies, or for screening for MTSP10 inhibitors for treating such diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    membrane-type serine protease; neoplastic disease; tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human MTSP1 protease domain encoding cDNA SEQ ID NO:3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; membrane-type serine protease; enzyme; MTSP10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2700 ACATACACTGTGAACTCAATCTCCAGGGCTCCAAAT 2735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /product= "MTSP1 protease domain"
/note= "no start codon given"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
1865..2590
/*tag= a
/partial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABZ22451 standard; cDNA; 3147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        type-II membrane-type serine
MTSP1; matriptase; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-MAY-2002; 2002WO-US15332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-MAY-2001; 2001US-291001P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CORV-) CORVAS INT INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-129309/12.
P-PSDB; ABP56620.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Madison EL, Yeh J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200292841-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-NOV-2002
                    2385
                                                                                             2345
                                                                                                                                                                                                                                                   2405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2745
                                                                                                                                                                                                                                                                                                                                2505
                                                                                                                                                                                                                                                                                                                                                                                                         2465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2525
```

RESULT 14

 δ g 104

2

64

224 184 284 244 344 304 404 364 464 524 484 584 544 704

664

604

CTCAATGGGCTCTGCTTGAGCAAGGGCAACCCTGAGTGTGACGGGAAGGAGGGGCTCTGAGC GATGGCTCCGATGAGAAAAACTGTGACTGTGAGTGTGACGGGAAGGAGGGGCTCGG	1865 1965 1925 2025 1985	2085 2045 2145 2105	2205 CTGGAGGTGGAGAAGTCGGTGGACCCCTCGTGGCCCCATCTGCCTGGTT 2264	Qy 2325 GAGGAGGTACCGGAGCGTGATCCTGCAGAAGGCTGAGATCCGTGTCATCAACCAGACC 2384 Db 2285 TATGGAGGCACTGGTGATCCTGCAAAAGGGTGAGATCCGCGTCATCAACAGAACC 2344 Qy 2385 ACCTGTGAGGACCTCATGCCGCAGCAGATCACCCCACGAATGTGTGTG	Qy 2445 AGTGGGGGTTGCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAGGGGGGAAA 2504 Db 2405 AGCGGGGGGGTGTCTGCCAGGGTGATTCCGGGGGACCCTTCTCAGCGTGAGGCG 2464 Qy 2505 GATGGGCGAATGTTCCAGGCTGATGTGGTGAGGTGATGCGTGAGGAAC 2564 Db 2465 GATGGGCGAATGTTCCAGGCTGATGTGGTGAGGTGAAGGAAC 2524	Qy 2565 AAGCCAGGCGTGTAACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACTGGG 2624 Db 2525 AAGCCAGGCGTGTACACACAGGCTCCTCTGTTTCGGGACTGGATCAAAGAGAACACTGGG 2584 Qy 2625 GTATAGCAGCATGGACAGACCGACCACAAACACCCCACAGGGATGCCCGACATGCACACACA	Qy 2685 CCTGGATACAGGAGAACACTGACGACATTATGCTGTGGCCTCCCCCCCAACACA 2744 Db 2642 CCAGTGTGCACG-CCTGCAGGCTGGACTGACTGACTGCACCGCCC-CCAGA 2699 Qy 2745 ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780 Db 2700 ACCTAGAACTGCATCCTTAGGACTCAGAGT 2780	RESULT 15 AAD47180 ID AAD47180 standard; DNA; 3147 BP. XX AAD47180;
	accac rerer rerer rrerer		1125		TACACGGACACCGGGTTCCTAGGTACCTCCTACGACCCCACGACGTCCCTAGGCCCATACTCCTACGACGACCCGTGCCCATACTCTTACTCCTACGACTCCCACGACGACGCCGTGCCCATACTCTCCTACGACTCCCATGACCTTCCTACGACGACGCCGACGCCGAGGAACGAAC	GCAGACTGCCCGGATTATAGTGATGAGGGTTACTGCCGATGCCACCCGCGTGGGGGGGG		1725 GACGAGGCTTCATGTGACAGCGTGAATGTCGTCTTGCACCAATATACCTACC

us-09-900-751-1.rng

304 404 364 464 424 524 484 584 544 644 604 704 664 764 724 824 784 884 844 944

```
TACTGGTCTGAGTTCAGCATCCCGCAGCACCTGGTGGAGGAGGCCGAGCGCGTCATGGCC
     CTGGTGTGGCATTTGCAGTACCGGGACGTGCGTGTCCAGAAGGTCTTCAATGGCTACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACACCGACACCGGCTTCTTAGCTGAATACCTCTCCTACGACTCCAGTGACCCATGCCCG
                                                                   AGGATCACAAATGAGAATTTTTGTGGATGCCTACGAGAACTCCAACTCCACTGAGTTTGTA
                                                                                                        AGCCTGGCCAGCCAGTGAAGGAGGCGCTGATGCTACAATGAAGTCCCTGTCCTG
                                                                                                                                                                            GGTCCCTACCACAAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTAC
                                                                                                                                                                                                             GGCCCCTACCACAAGGAGTCGGCTGTGACGCCTTCAGCGAGGGCAGCGTCATCGCCTAC
                                                                                                                                                                                                                                                                                                                      GTGGAGCGAGTTGTAACATTGCCACCCCGAGCACGGGCACTGAAATCCTTCGTGCTAACA
                                                                                                                                                                                                                                                                                                                                                       GAGGAGCGCGTAGTCATGCTGCCCCCGCGGCGCGCTCCCTGAAGTCCTTTGTGGTCACC
                                                                                                                                                                                                                                                                                                                                                                                          TCTGTGGTGGCCTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGTITIGCCCTGCATGCCCATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCTTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACAGCCCCTACCCCGCTCATGCCCGCTGCCAGTGGGCCCTGCGGGGGGGACGCCGACTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGCTGAGCCTCACCTTCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Greengageercacerrececagerrraaacerrecerecaacaacaacaacaacaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCACCTTCTCACCCTCCTACAACCTGACTTTCCTCCTCCCAGAACGTCTTCCTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCACCTACCCTCCTACAACCTGACCTTCCACTCCTCCAGAACGTCCTGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACGCTGATAACCAATACTGACCGGCGACATCCTGGCTTTTGAGGCCACTTTCTTCCAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TACTACCCAGGCCACTACCCACCCAACATTGACTGCACATGGAACATTGAGGTGCCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGITIGIGGIGAGCAACAACAGCAAGAATIACAGICCACITCCAITICIGAICACICG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGTTCGTCGTCACCAGCAACAACAAGATCACAGTTCGCTTCCACTCAGATCAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TACACGGACACCGGGTTCCTAGCTGAGTACCTCCTACGACTCCAACGACCCGTGCCCA
                                      AGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTTTATC
                                                                                                                                         AGCCTGGCCAGCAAGGTGAAGGACGCGCTGAAGCTGCTGTACAGCGGAGTCCCATTCCTG
                                                                                                                                                                                                                                                TACTGGTCAGAGTTCAGCATCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                       TCAGTGGTGGCTTTCCCCACGGACTCCAAACAGTACAGAGGACCCAGGACAACAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACAGTCCCTACCCGGCGCATGCCCGCTGCCAGTGGGTCCTGCGGGGGGGCGCCGACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          creergacegreracaacaccercaagceccargaagceccargecerrergrerer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Acacticanaaccaacacticacccccatcccccccrrrrcaccccaccrrrrcacccc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCAAGATGAGCAGCTGTGGCGGCTTTTTGAGTGACACCCCAAGGGACATTTAGCAGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTAGGATGAGCAGCTGTGGAGGCCGCTTACGTAAAGCCCAGGGGACATTCAACAGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACTATICCAGGCCACTACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACCGGAACGTGAAGGTGCGCTTCAAACTCTTCTATCTGGTGGACCCCCAACGTACCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACCAGCATGTGAAGGTGAGCTTCAAA,TTCTTACCTGCTGGAGCCCGGCGTGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCTCCTGCACCAAGGACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGAGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCACCTGCCCCAAGGACTACGTGGAGATCAATGGGGAGAAATACTGCGGAGAGAGGTCC
                                                                                                        405
                                                                                                                                                                                                                                                                                                                                                                                                                         605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1365
     245
                                                                     305
                                                                                                                                           365
                                                                                                                                                                                                             425
                                                                                                                                                                                                                                                525
                                                                                                                                                                                                                                                                                   485
                                                                                                                                                                                                                                                                                                                      585
                                                                                                                                                                                                                                                                                                                                                                                          645
                                                                                                                                                                                                                                                                                                                                                                                                                                                            705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1205
                                      345
                                                                                                                                                                              465
                                                                                                 ò
                                                                                                                                      g
                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                 õ
                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 П
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                  ò
                                                              임
                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGGTTCAAAAAGTCTTCAATGGCCATCTG 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to transmembrane serine protease 14 (CVSP14), its nucleic acid sequence and the method based on them. The methods and compositions of the invention are useful for diagnosing, preventing and/or treating conditions associated with the aberrant expression or activity of the CVSP14 polypeptide, such as cancers and malignancies of the breast, cervix, prostate, lung, ovary or colon. The methods are also useful for identifying compounds that will modulate the protease activity of CVSP14 polypeptide, and monitoring tumour progression and/or therapeutic effectiveness. CVSP14 DNA used in gene therapy. The present sequence is human membrane type serine protease, MTSP1 DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACTTCGGCGCGCGACTCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAG 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACTICGGCGCGGGACTCAAGTACAACTCCCGGCACGAGAAGTGAATGGCTTGGAGGAA 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCCGTGGAGTTCCTGCCAGTCAACAACGTCAAGAAGGTGGAAAAGCATGGCCCGGGGCGC 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGGTGGTGCTGGCAGCCGTGATCGGCCTCCTCTTGGTCTTGCTGGGGATCGGCTTC 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            64
                                                                                protease 14; CVSP14; cancer; malignancy; breast; colon; cytostatic; membrane-type serine protease; enzyme; MTSP1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            useful for diagnosing, preventing and/or treating disorders, such as cancers and malignancies of the breast, cervix, prostate, lung, ovary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGCTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAAGCGAGGCCCCCAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGCGCCTCGGGGTACCATGGGGAACGATCGGGCCCGCAAGGGCGGAGGGGGCCCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CVSP14 polypeptide and encoding nucleic acid molecule,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 3147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3147 BP; 654 A; 952 C; 958 G; 583 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        508;
                                                                                                                                                                                                                                             "Human MTSP1 protein"
                                                 Human membrane-type serine protease, MTSP1 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60.6%; Score 1883.2;
llarity 81.2%; Pred. No. 0;
Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 167-171; 185pp; English
                                                                                                                                                                                       Location/Qualifiers
23..2590
/*tag= a
                                                                                                                                                                                                                                                                                                                                                   20-MAR-2002; 2002WO-US09039
                                                                                                                                                                                                                                                                                                                                                                                   22-MAR-2001; 2001US-278166P
                                                                                                                                                                                                                                             /product=
                                                                                                                                                                                                                                                                                                                                                                                                                    (CORV-) CORVAS INT INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-018938/01.
P-PSDB; AAE29791.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Yeh J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
Matches 2223; Conser
                                                                                                                                                                                                                                                                              WO200277263-A2
                                                                                      serine
                                                                                                   therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               purified
                                                                                                                                                          sapiens
                24-FEB-2003
                                                                                                                                                                                                                                                                                                                 03-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Madison EL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  colon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                      Ното
                                                                                                     gene
원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ਨੇ
```

1004

964

904

1064 1024 1124 1084 1184

a do

8 6 6 6

																	<u>-</u>
		ė.															.*
1484	1544	1604	1664	1724	1784	1844	1904	1964	2024	2084	2144	2204	2264	2324	2384	2444	2504
1425 GGGAIGTICAIGTGCAAGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGG 	1485 GCGGACTGCCCGGATTATAGTGATGAGGGTTACTGCCGATGCAATGCCACCCAC	1545 ACGTGCAAAAACCAGTTCTGCAAGCCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGT 1505 ACGTGCAAGAACAAGTTCTGCAAGCCCCTCTTCTGGGTCTGCGACAGTGTGAACGACTGC	1605 GGGGACGGAAGTGACGAGGGGTGTGCAGCTGCTGCTGGGGGGAGTTTCAAGTGTTCCAAT 1	1665 GGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGATGGGTCT	1725 GACGAGGCTTCATGTGACAGCGTGAATGTCGTCTTGCACCAATATACCTACC	1785 CAAAATGGCCTCTGTCTGAGCAAGGGCAACCCTGAGTGTGATGGGGAAGACGGACTGTAGC	1845 GATGGCTCCGATGAGAAAACTGTGAGCTGCGGTGCGATCCTTTACCAAACAGGCTCGC	1905 GTGGTTGGTGGCACGAATGCGGACGAGGGCGAGTGGCCCTGGCAGGTGAGCCTCCACGCC	1965 CTGGGCCAGGGCCACTTGTGTGGGGCCTCGCTCATCTCTCCTGACTGGCTGG	2025 GCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCC	2085 ITCCTGGGTCTGCTGGACCAGAGCGCAGTGCCTCTGGGGTGCAGGAGCTGAAAGCTC	2145 AAACGTATCATCACCCACCCTTCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTG	2205 CTGGAGCTGGAGAGAGGAGTACAGCACCGTCGTGGCCCCCATCTGCCTGC	2265 GCTACCCAIGTCTTCCCTGCTGGCAAGGCCATCTGGGTCACAGGCTGGGGGCACACAAA 	2325 GAGGGAGCTGCGGGGCTGATCCTGCAGAGGGTGAGATCCGTGTCATCAACAGACC	2385 ACCTGTGAGGACCTCATGCCGCAGCAGATCACCCACGAATGATGTGTGTG	2445 AGTGGGGGTGTGGACTCCTGCCAGGTGACTCTGGTGGCCCCTTGTCAGGGGGGAGAAA

oy do yo

유 상 유

8 np 64

අ_ධ දුරු අ

& 90 &

ò	2505	2505 GATGGGCGAATGTTCCAGGCTGGTGTGGTGAGCTGGGGTGAGGCTGCGCTCAGAGGAAC 2564
qq	2465	GAIGGGCGGAICTICCAGGCCGGTGTGGTGTGTGTGTGTGTGTGTGTGTGTGTG
δ	2565	2565 AAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGG 2624
qq	2525	AAGCCAGGCGTGTACACAAGGCTCCCTCTGTTTCGGGACTGGATCAAAGAGAACACTGGG 2584
à	2625	GTATAGCAGCAGCAGACCACACAAACACCCCACAGGGATGCCCGACATGCACA 2684
qa	2585	2585 GTATAGGGCCGGGGCCACCCAATGTGTACACCTGCGGGGCCACCCATCGTCCACC 2641
à	2685	2685 CCTGGATACAGGAGGAACACTGACGACATTTATGCTGTGGCCTCCCCCCCC
QQ	2642	CCAGTGTGCACG-CCTGCAGGCTGGAGACTGGACCGCTGACTGCACCGCCC-CCAGA 2699
δ	2745	2745 ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
Db	2700	2700 ACATACACTGGAACTCCAGGGCTCCAAAT 2735
Search Job tim	ch completed: Fr time : 812 secs	Search completed: February 21, 2004, 02:22:12 Job time : 812 secs

```
Sequence 1, Appli
Sequence 1, Appli
Sequence 9, Appli
Sequence 9, Appli
Sequence 10, Appl
Sequence 1480, Ap
Sequence 1480, Ap
Sequence 17, Appl
Sequence 1, Appli
                                                                                                                                                                                                   February 21, 2004, 02:07:32 ; Search time 179 Seconds (without alignments) 7658.860 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                 Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1139956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Issued Patents NA:*
1: /cgn2_6/ptodata/2/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/2/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/2/ina/PcTus_COMB.seq:*
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-280-116-10
US-09-702-705-1480
US-09-702-705-1480
US-09-580-116-107
US-09-518-046-3
US-09-518-046-3
US-09-691-840-1
US-09-016-366A-20
US-09-016-366A-22
US-08-807-151-2
US-08-4048-15
US-08-4048-15
US-08-4048-12
US-08-4048-12
US-09-016-366A-22
US-09-016-366A-22
US-09-016-366A-22
US-09-016-366A-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-342-749-29
US-09-691-840-29
US-09-079-970A-1
US-09-079-970A-4
US-09-016-366A-18
US-09-978-404B-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-644-600-18
US-09-027-337-9
US-09-644-600-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-261-416-1
US-09-000-846-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  569978 seqs, 220691566 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                 - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                               US-09-900-751-1
3106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18883.2
11533.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
1753.0.3
175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9 B
                                                                                                                                    OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Searched:
                                                                                                                                                                                                   Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Result
No.
```

Sequence 30, Appli Sequence 1, Appli Sequence 9, Appli Sequence 55, Appl Sequence 15, Appl Sequence 15, Appl Sequence 18, Appl Sequence 18, Appl Sequence 11, Appl		Serine Protease Overexpressed in	DB 2; Length 3147; 508; Indels 5; Gaps 3;	GATOGGACOGCCAAAACCAIGGGTAGCAATOGGGGCCGGAAGGCCGGAGGGGCTCTCAG 104 	GACTTCGGCGCGGGACTCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAG 164 	GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAGCGAGGCCCCAGGCGC 224 	rgggrggrggrggggggggrgrrcacrccrccrccrcarggcrggc	CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG 344	GTTTATC 4
US-09-023-942A-30 US-08-386-653A-1 US-08-508-44GC-9 US-09-370-838-80 US-09-370-838-18 US-09-370-838-18 US-09-130-188-188 US-09-10-738A-188 US-09-10-738A-188 US-09-10-738A-188 US-09-10-738A-188 US-09-10-738A-188 US-09-10-10-131 US-09-10-131	ALIGNMENTS	337B Extracellular Ovarian Carcino 09/027,337B	Score 1883.2; D Pred. No. 0; 0; Mismatches 5	CATGGGTAGCAATCGGGGCCG 	PAGTACAACTCCCGGCTA 	rgcgaacaatgccaagaaa 	AGTGCTGTTCAGCTTCCTC :GTGCTGATCGGCCTCCTC	CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGGTTCAAAAAGTCTTCAATGG 	TTTCTGGATGCGTATGAG
1010 1010 1010 1010 1010 1010 1010 101		on US/ Timoth Hirot TADG-1 Breast 4 WUMBER 1998- : 13	0.6% 1.2%	rcggaccgccaaaacc 	GCGGGACTC	FITCCTGCCT	SCTGGTGGCA CTGGCAGCC	SCACTTCCAT	AATGAGATC
HH B B B B B B A A A A A A A A B B B B A A A A B B B B B A A A A B		cat (cat (con: (con: (con: (con: (con: (con: (con: (con: (con: (con:	similarity 8 3; Conservati	GATCGGACC	GACTTCGG(GACTTCGG(GGTGTGGAC 	TGGGTGGTC TGGGTGGTC	CTGGTGTGC CTGGTGTGC	AGGATCACP
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		1 6027- 6026- 6026- 6026- 6026- 6027- 6027- 6027- 6027- 6027-	Query Match Best Local S Matches 2223	4 5 5	105	165	225	285	345
प्राचित्र । । । । । । । । । । । । । । । । । । ।		RESULT US-09- 1 Sequ 1 Pate 1 Pate 1 APP 1 TIT 1	Que Bes Mat	δ Dp	ð 8	<i>&</i> 8	& 8	Qy Dp	ζ A

Ħ

8 6 6 6 6 6 6 6 6 6 6 6 6 6 6

8 8 6 8 6 8 6 8 6 8 6 8 6 8 6

2699

Б ò g δ g

g ò

à

g

d ò 셤

ò

ద

à Db ð

ò

q à d 셤

 δ

Dp à q ⋧

ò

```
2903 credrichecarricharaccedeacerecererecagaagererreaareerakeare 2844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2843 AGGATCACAAATGAGAATTTTGTGGATGCCTACGAGAACTCCAACTCCACTGAGTTTGTA 2784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2783 AGCCTGGCCAGCAAGGTGAAGGACGCGCTGAAGCTGCTGTACAGCGGAGTCCCATTCCTG 2724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2723 GECCÉCTACCACAAGGAGTCGGCTGTGACGGCCTTCAGCGAGGGCAGCGTCATCGCCTAC 2664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3083 GACTTCGGCGCGCGGGACTCAAGTACAACTCCCGGCACGAAAGTGAATGGCTTGGAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           45 GATCGGACCGCCAAAACCATGGCTAGCAATCGGGGCCCGCAAGGCCGGAGGGGGCTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACTTCGGCGCGGGACTCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2963 TGGGTGGTGGTGGGCGGGGTGGTGTGTTTGTTTGCTGGGTTTGGTTTCGGGTTTCGGCTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCCTGGCCAGCCAGGTGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         525 TACTGGTCAGAGTTCAGCATCCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCATGGCT
                       2642 ccadrerecace-conceaecresadacresaceceridacrecaceaececece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAGCGAGGCCCCAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTTTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTCCCTACCACAAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3023 Gecerceaerrecreceaercaacaacercaagaagaegeegeaaaagcareceegeeeece
                                                                                                                                                                                                                                                                                                       APPLICANT: Cerien, Timothy J.

TITLE OF INVENTION: TADG-15: An Extracellular Serine Protease
TITLE OF INVENTION: TADG-15: An Extracellular Serine Protease;
TITLE OF INVENTION: Overexpressed in Carcinomas
FILE REPERENCE: D6064CIP,000
CURRENT FILING DATE: 2000-08-23
PRIOR PELING DATE: 1999-10-20
PRIOR PILING DATE: 1999-10-20
PRIOR PILING DATE: 1999-10-20
PRIOR PILING DATE: 1999-02-20
NUMBER OF SEQ ID NOS: 98
SEQ ID NO 18
IEBNGTH: 3147
TYPE: PAYA
                                                                                                                      ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
                                                                                                                                                                 2700 ACATACACTGTGAACTCAATCTCCAGGGCTCCAAAT 2735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 60.6%; Score 1883.2; DB 4; Best Local Similarity 81.2%; Pred. No. 0; Matches 2223; Conservative 0; Mismatches 508;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Antisense of TADG-15 US-09-644-600-18
                                                                                                                                                                                                                                                                                       Sequence 18, Application US/09644600
Patent No. 6451500
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: RNA ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                     US-09-644-600-18/c
                                                                                                                      2745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            465
                       2685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                  g
                                                                                                                   ð
                                                                                                                                                          엱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTATAGCAGCATGGACAGACAGCCGACCACAAACACCCCACAGGGATGCCCGACATGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2585 GTATAGGGGCCGGG---GCCACCCAAATGTGTACACCTGCGGGGCCACCCATCGTCCACC 2641
                                                                                                                                                                                           1625 GGGAAGTGCCTCTCGAAAAGCCAGCAGTGCAATGGGAAGGACGACTGTGGGGACGGTCC 1684
                                                                                                                                                                                                                                                                                                                                           CAAAATGGCCTCTGTCTGAGCAAGGGCAACCCTGAGTGTGATGGGAAGACGGACTGTAGC 1844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCTCCCATGTCTTCCCTGCCGGCAAGGCCATCTGGGTCACGGGCTGGGGACACACCAG 2284
1505 ACGTGCAAGAACAAGTTCTGCAAGCCCCTCTTCTGGGGTCTGCGACAGTGTGAACGACTGC 1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TATEGAGGCACTGGCGCCGGTGTCCTGCAAAAGGGTGAGATCCGCGTCATCAACCAGACC
                                                                                                                                                                                                                                                                                1685 GACGAGGCCTCCTGCCCCAAGGTGAACGTCGTCACTTGTACCAACAACACCTACCGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAACGTATCATCACCCACCCTTCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTGGGGGTGTGGACTCCTGCCAGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATGGGCGAATGTTCCAGGCTGGTGTGGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                           CTCAATGGGCTCTGCTTGAGCAAGGCAACCCTGAGTGTGACGGGAAGGAGGACTGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                               GATGGCTCCGATGAGAAAACTGTGACTGTGGGCTGCGATCCTTTACCAAACAGGCTCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTTGTTGGGGGCACGGATGCGGATGAGGCGGAGTGGCCCTGGCAGGTAAGCCTGCATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2105 AAGCGCATCATCTCCCACCCTTCTTCAATGACTTCACCTTCGACTATGACATGGCGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTACCCATGTCTTCCCTGCTGCCAAGGCCATCTGGGTCACAGGCTGGGGGCACACAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGGGCGGATCTTCCAGGCCGGTGTGGTGAGCTGGGGAGACGGCTGCGCTCAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGCCAGGCGTGTACACACAAGGCTCCCTGTAGTTCGGGGACTGGATCAAAGAGCACACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCCAGGCGTGTACACAAGGCTCCCTCTGTTTCGGGACTGGATCAAAGAGAACACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TICCTGGGTCTGCTGGACCAGAGCAAGCGCAGTGCCTCTGGGGGTGCAGGAGCTGAAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2045 Tricinggerracaccaaccagaccagecagecacceceregesracagasecagecre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AccridedaAacerecridededaAaaareAededededaAararararaceredaGerreere
                                                                                                                                                                                                                                              1805 GACGGCTCAGATGAGAAGGACTGCGACTGTGGGGCTGCGCGTCATTCACGAGACAGGCTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGGTTGGTGGCACGAATGCGGACGAGGGCGAGTGGCCCTGGCAGGTGAGCCTCCACGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACC
                                                GGGGACGGAAGTGACGAGGAGGGCTGCAGCTGTCCTGCTGGGAGTTTCAAGTGTTCCAAT
                                                                                              1565 GGAGACAACAGCGACGAGCAGGGGTGCAGTTGTCCGGCCCAGACCTTCAGGTGTTCCAAT
                                                                                                                                               GGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGATGGGTCT
                                                                                                                                                                                                                                                                                                                                        1785
                                                                                                                                                                                                                                                                                                                                                                                           1745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2165
                                                                                                                                                                                                                                            1725
                                                                                                                                                                                                                                                                                                                                                                                                                                               1845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2465
                                                1605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1965
```

3024

224

164

. Μ

Gaps

'n

Length 3147;

104

2964

284

2904

344

404

464

q

qq à g δ g

 δ

 δ

524

Mon

Ŋ

1044 2324 2384 2744 2684 449 864 684 564 TTCCTGGGCTTGCACGACCAGAGCCAGCGCCCCTGGGGTGCAGGAGCGCAGGCTC GCACACTGCTACATCGATGACAGGATTCAGGTACTCAGACCCCACGCAGGGACGGCC GCTACCCATGTCTTCCCTGCTGGCAAGGCCATCTGGGTCACAGGCTGGGGGCCACACAAA GCCTCCCATGTCTTCCCTGCCGCAAGGCCATCTGGGTCACGGGCTGGGGACACACCCAG GACGAGGCCTCCTGCCCCAAGGTGAACGTCGTCACTTGTACCAAAACACACCTACCGCTGC GATGGCTCCGATGAGAAAACTGTGACTGTGGGCTGCGATCCTTTACCAAACAGGCTCGC GGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAAGATGGGTCT crcaaresecreresecrasesecaacecaecereaerereaegeaegeaegeaereraec GACGGCTCAGATGAGAAGGACTGCGACTGTGGGCTGCGGTCATTCACGAGACAGGCTCGT GTGGTTGGTGGCACGAATGCGGACGAGGGCGAGTGGCCCTGGCCAGGTGAGCCTCCACGCC cresscrassscratcresssratcressratcressratcressratcress TTCCTGGGTCTGCTGGACCAGAGCGCAGTGCCTCTGGGGTGCAGGAGCTGAAGCTC AAACGTATCATCACCCACCCTTCCAATGATTTCACCTTCGACTATGACATCGCCTTG AAGGGCATCATCTCCCACCCTTCTTCAATGACTTCACCTTCGACTATGACATGCGCTG GAGGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACC 863 TATGGAGGCACTGGCGCGCTGATCCTGCAAAAGGGTGAGATCCGCGTCATCAACCAGACC ACCTGCGAGAACCTCCTGCCGCAGCAGATCACGCCGCGCGTGATGTGCGTGGGCTTCCTC CAAAATGGCCTCTGTCTGAGCAAGGCAACCCTGAGTGTGATGGGAAGACGGACTGTAGC GTTGTTGGGGGCACGGATGCGGATGAGGCGCAGTGGCCCTGGCAGGTAAGCCTGCATGCT GCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCC AGIGGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGCGAAAA GATGGGCGAATGTTCCAGGCTGGTGTGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAAC GATGGGCGGATCTTCCAGGCCGGTGTGGTGAGCTGGGGAGACGGCTGCGCTCAGAGAAC AAGCCAGGCGTGTACACAAAGGCTCCCTGTAGTTCGGGGACTGGATCAAAGAGCACACACGGG GTATAGCAGCATGGACAGACAGCCGACCACAAACACCCCACAGGGATGCCCGACATGCACA GTATAGGGGCCGGG---GCCACCCAAATGTGTACACCTGCGGGGCCACCCATCGTCCACC ccastrerecace-ccrecasecresasacresaccecreacresaccececece ø

```
1540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1839
                                                                                                                                                             709
                                                                                                                                                                                                                                                       169
                                                                                                                                                                                                                                                                                                   1060
                                                                                                                                                                                                                                                                                                                                                 827
                                                                                                                                                                                                                                                                                                                                                                                             1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1180
                                                                                                                                                                                                            1000
                                                                                                                  942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                      업
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ୍ ପ୍ର
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                          셤
                                                                                                               \dot{\delta}
                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                   임
                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                      .
B
                                                                                                                                                                                                                                                                                ij
                                                                                                                                        Sequence 9, Application US/09027337B

Batent No. 5972616

GENERAL INFORMATION:
APPLICANT: O'Brien, Timothy J.
APPLICANT: Tanimoto, Hinotoshi
TITLE OF INVENTION: TABG-15: An Extracellular Serine Protease Overexpressed :
TITLE OF INVENTION: Breast and Ovarian Carcinomas
FILE REPERBENCE: B664
CURRENT APPLICATION NUMBER: US/09/027,337B
CURRENT FILING DATE: 1998-02-20
NUMBER OF SEQ ID NOS: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTGACAGCCCCTACCCCGCTCATGCCCGCTGCCAGTGG-----GCTGCGGGGACGCGGAC 592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGTGCTGAGCTACTCGAGCTGACTCGCAGCTTGACTGCGCCTCGACGACGAGCGCGCAGC 652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rrccristriciarrrecagnaccissaconsciente as a reconstruction of the contraction of the cont
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GC-CAGGAGCGCGTAGTCATGCTGCCCCCGCGGCGCGCTCCCTGAAGTCCTTTGTGGTC 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           822 TCTGTGCTGAGCCTCACCTTCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGT 881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGAGGATCACAAATGAGAATTTTGTGGATGCCTACGAGAACTCCAACTCCACTGAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TACTACTGGTCTGAGTTCAGCATCCCGCAGCACCTGGTTGAGGAGGCCGAGCCGTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TACTACTGGTCAGAGTTCAGCATCCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTGTGGAGCGAGTTGTAACATTGCCACCCCGAGCACGGGCACTGAAATCCTTCGTGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    accreagregregerrirececaegaerecaaaaeagragagagaegaegaeagaeage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCAGITITIGCCCTGCATGCCCATGGTGCAGTGACACGCTTCACTACCCCTGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 recadeririosecerecado-cesecereresaseceresarsesecricadeseceresesecendesecentes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCCAACAGTCCCTACCCGGCGCATGCCCGCTGCCAGTGGGTCCTGCGGGGGGACGCCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TIGCTGGIGTGGCACTICCATIATCGGAATGTGCGGGTTCAAAAGTCTTCAATGGCCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCAGCCTGGCCAGCCAGGTGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTAAGCCTGGCCAGCAGGTGAAGGACGCGCTGAAGCTGTACAGCGGGAGTCCCATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGGTCCCTACCACAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACATCTGTGGGGCCTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGCTGGGTGGTGCTGGCAGCCGTGCTGATCGGCCTCCTCTTGGTCTTGCTGGGGATCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGAGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 2900;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   502; Indels
ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: SNC19 mRNA sequence (U20428)
US-09-027-337-9
                                              448 ACATACACTGTGAACTCAATCTCCAGGGCTCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1530.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ywery march
Best Local Similarity 79.1%;
Matches 2011; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                         2900
                                                                                                                  RESULT 4
US-09-027-337-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     702
                                                                                                                                                                                                                                                                                                                                                                                                                   ID NO 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        οq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sy
B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8 G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
ð
                                      g
```

1119 1179 1239 1006 1299 1066 1359 1126 1419 1479 1305 1362 1658 1422 1838 1898 1958 TIGICACGCIGATAACCAATACTGACCGGCGACATCCTGGCTTTGAGGCCACTTTCTTCC 1059 1187 GCCCGGGGCAGTTCACGTGCCGCACGGGGCGGTGTATCCGGAAGGAGCTGCGCTGTGATG 1246 AGTICACGIGCAAAAACCAGIICIGCAAGCCCCICIICIGGGICIGIGACAGIGICAACG 1599 TCCAATGGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGAT 1718 1603 reradeceacescreasareasaaseacreesacreresescreeserecesreareaceaceaseas 1662 1663 GCTCGTGTTGGGGGGCACGGATGCGGATGAGGGCGAGGTGGCCCTGGCAGGTAAGCCTG 1722 946 708 826 941 1543 CGCTGCCTCAATGGGCTCTGCTTGAGCAAGGGCAACCCTGAGTGTGACGGGAAGGAGGAC 653 GACCTGGTGA-CGTGTACAACACCCTGAGCCCCATGGAGCCCCACGC---CTGGTGAGTG 1300 GGTCCCAGTTTGTGGTGAGCAGCAGCAGCAAGATTACAGTCCACTTCCATTCTGATC 1067 GGTCCCAGTTCGTCGTCACCAGCAACAGCAACAAGATCACAGTTCGCTTCCACTCCAGATC 1127 AGTCCTACACCGACACCCGGCTTCTTAGCTGAATACCTCTCCTACGACTCCAGTGACCCAT 1306 AGTTCACGTGCAAGAGCAAGTTCTGCAAG---CTCTTCTGGGTCTGCGACAGTGTGAACG GGGTCTGACGAGGCTTCATGTGACAGCGTGAATGTCGTCTTGCACCAAATATACCTAC 1483 édereceaceacecerecrececeaagreaacerecerereracaaceaacareceae CGCTGCCAAAATGGCCTCTGTCTGAGCAAGGGCAACCCTGAGTGTGATGGGAAGACGGAC TGTAGCGATGGCTCCGATGAGAAAACTGTGACTGTGGGGCTGCGATCCTTTACCAAACAG 887 GCCCCTACTACCAGGCCACTACCCACCAACATTGACTGCACATGGAAAATTGAGGTGC CTGGGGGACCTGCCCCAAGGACTACGTGGAGATCAATGGGGAGAAATACTGCGGGAGA 1420 GCCCAGGGATGTTCATGTGCAAGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACG 1247 geregec-gaergeaeceaecaeaecargagereaaergeagriecgaegeegeeee 1600 ACTGTGGGGACGGAAGTGACGAGGACGCTGCAGCTGTCTG-CTGGGAGTTTCAAGTGT GACCTGGTCACCGTGTATGATAGCCTGAGCCCCATGGAACCCCCACGCTGTGGTGCGGCTG TCATCACACTGATAACCAACACTGAC--GCGGCATCCCGGCTTTGAGGCCACCTTCTTCC AGCTGCCCAAGATGAGCAGCTGTGGCGGCTTTTTGAGTGACACCCAAGGGACATTTAGCA CCAACAACGGGAACGTGAAGGTGCGCTTCAAACTCTTCTATCTGGTGGACCCCAACGTAC 947 CCAACAACCAGCATGTGAAGGTGCGCTTCAAATTCTTCTTACCTGCTGGAGCCCGGCGTGC 1240 CAGTGGGCTCCTGCACCAAGGACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGA 1360 ACTCGTACACGGACACCGGGTTCCTAGCTGAGTACCTCTCCTACGACTCCAACGACCGGT Agrigogiagacaacagogacgagogogorriocarriorecogogocorgagorricagorgi GCCCCTACTATCCAGGCCACTACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGC

```
98
NUMBER OF SEQ ID NOS:
SEQ ID NO 9
LENGTH: 2900
                                                                                                                TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                         ; US-09-644-600-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ρp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2494
                                                                                                                                                                                                                                                                                                        2079 ACGGCCTTCCTGGGTCTGCTGGACCAGAGCGCAGTGCCTCTGGGGTGCAGGAGCTG 2138
                                                                                                                                                                                                                                                                                                                                                                          1841 Acedectricerdeserraceaceaceaecaeceaecea--eseceresesreseaecec 1898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1899 AGGCTCAAGCGCATCATCTCCCCCCTTCTTCAATGACTTCACCTTCGACTATGACATC 1958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2199 GCCTTGCTGGAGCTGGAGAAGTCGGTGGAGTACAGCACCGTCGTGCGCCCCATCTGCCTG 2258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTGATGCTACCCATGTCTTCCCTGCTGCCAAGGCCATCTGGGTCACAGGCTGGGGGCCAC 2318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTGGGGTATAGCAGCATGGACAGACAGCCGACCACAACACCCCACAGGGATGCCCGACA 2678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cadaccaccreceadaaccrecrecedededarcacecedededrerereresede
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ga escenar escendantente casece en en escendado en escenta escendado en escenta escent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGAACAAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGAACAAGCCAGGCGTGTACAAGGCTCCCTCTGTTTCGGGAATGGATCAAAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             recaceceastratecacecerses as a consequence de consequences de c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAAAAGAGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TICCTCAGTGGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGAAAGATGGGCGAATGTTCCAGGCTGGTGTGGTGAGCTGGGGTGAAGGCTGCGCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Acresestaraseseccess---eccacceaaarsreracacceseseseccaccarce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1959 GCGCTGCTGGAGCTGGAGAAACCGGCAGAGTACAGCTCCATGGTGCGGCCCATCTGCCTG
           A SECTOT GEORGE CANCEL CATE CONTROL CATECUTOR CONTROL CATEC
                                                                                                                                                       TCTGCAGCTCATTGCTTTCAGGATGACAAAAATTTCAAGTACTCCAGACTACACGATGTGG
                                                                                                                                                                                                                          Terrecedeacaerrecraeareareacaeacaerrecaegraerreacaececeaece-caes
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGCTCAAACGTATCATCACCCACCCTTCCATGATTTCACCTTCGACTATGACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: O'Brien, Timothy J.
APPLICANT: Tanimoto, Hirotoshi
ITILE OF INVENTION: TAGG-15: An Extracellular Serine Protease
TITLE OF INVENTION: Overexpressed in Carcinomas
FILE REFERENCE: D6046CIF/D
CURRENT APPLICATION NUMBER: US/09/644,600
CURRENT FILING DATE: 2000-08-23
PRIOR APPLICATION NUMBER: 09/421,213
PRIOR APPLICATION NUMBER: 09/421,213
PRIOR APPLICATION NUMBER: 09/027,337
PRIOR FILING DATE: 1998-02-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2739 AACACACCCAGACTGTGAACT 2760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCAGAACATACACTGTGAACT 2516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 9, Application US/09644600 Patent No. 6451500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-644-600-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2495
                                                                                                                                                           2019
                                                                                                                                                                                                                                 1783
                                                                                                                                                                                                                                                                                                                                                                                                                                                            2139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2259
                                                                                     1723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2559
           1959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ά
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                          ΩD
           Š
                                                                          임
                                                                                                                                                           ò
```

```
AGCTGCCCAAGATGAGCAGCTGTGGCGGCTTTTTGAGTGACACCCCAAGGGACATTTAGCA 1119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TIGICACGCIGATAACCAATACIGACCGGCGACAICCIGGCITIGAGGCCACITICIICC 1059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420 AccicaGracacrificacacaGaCracaAACAGTACAGAGGACCCAGGACAACAG 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            geacrecreaceracreacercacerecerecricacrececerecerecaces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACCTGGTGA-CGTGTACACACCCTGAGCCCCATGGAGCCCCACGC---CTGGTGAGTG 708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361 éc-caddadeceradrearecrécecedesecedecenterecréaderectrarendese 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCCAACAGICCCIACCCGGCGCAIGCCCGCTGCCAGIGGGICCTGCGGGGGGACGCCGAC 821
                                                                                                                                                                                                                                                                                                                                                                                                                                    281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTGGCACCTTCTCACCCTCCTACAACCTGACTTTCCTCTC--TCCCAGAACGTCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 CTGGGCCCCTACCACAAGGAGTCGGCTGTGACGGCCTTCAGCGGGGAGGGCAGCGTCATCGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TACTACTGGTCAGAGTTCAGCATCCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTGTGGAGCGAGTTGTAACATTGCCACCCCGAGCACGGGCACTGAAATCCTTCGTGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACATCTGTGGTGGCCTTCCCCATTGACCCCCAGAATGCTGCAGAGGACTCAGGACAACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCAGTTTTGCCCTGCATGCCCATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          congacado con a construción de construcción de construcción de construcción de construcción de construcción de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTGTGCTGAGCCTCACCTTCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACCTGGTCACCGTGTATGATAGCCTGAGCCCCATGGAACCCCCACGCTGTGGTGCGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rerescaceraceraceraciana de caraceración de consecue de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCATCACACTGATAACCAACACTGAC--GCGGCATCCCGGCTTTGAGGCCACCTTCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cecheesheerecheerecenecrearcecricaricaricaricarianing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      282 ITGCIGGIGIGGCACTICCATIAICGGAAIGIGCGGGITCAAAAAGICIICAAIGGCCAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGAGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCAGCCTGGCCAGCTGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGGTCCCTACCACAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 ATGAGGATCACAAATGAGAATTTTGTGGATGCCTACGAGAACTCCAACTCCACTGAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                              6451500 #U20428
                                                                                                                                                                                                            Length 2900;
                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                            DB 4;
                                                                                                                                                                                                                                                                                                                     502;
FEATURE: OTHER INFORMATION: SNC-19; GeneBank Accession No.
                                                                                                                                                                                                      Score 1530.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                49.3%;
Best Local Similarity 79.1%;
Matches 2011; Conservative (
```

2498 2258 2618

2678

2738

09

gg à g $\overset{\sim}{\circ}$ g à

g ŏ qq ð

셤 δ g ð

Д ₹ 셤 ò d δ

8 à

ò

g

 δ

ð DP

qq à 음

à 엄

셤

 Δ

```
1719 GGGTCTGACGAGGCTTCATGTGACAGCGTGAATGTCGTCTTGCACCAAATATACCTAC 1778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Robison, Keith E.
APPLICANT: Robison, Keith E.
TITLE OF INVENTION: Nucleic Acid Molecules Encoding Human Protease Homologs
TITLE OF INVENTION: Nucleic Acid Molecules Encoding Human Protease Homologs
FILE REFERENCE: 5800-24, 035800/176965
CURRENT APPLICATION NUMBER: US/09/280,116A
CURRENT FILING DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 268
SOFTWARE: PATENTIN Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCAATGGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGACAACTGTGGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGCACACCTGGATACAGGAGGAACACTGACGACATTTATGCTGTGGCCTCCCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        recialecciones de la constante 
1959 GCGCTGCTGGAGATAACCGGCAGAGTACAGCTCCATGCTGCGCCCATCTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACTOGOGIATAGCAGCATGGACAGACAGCCGACCACAAACACCCCACAGGGATGCCCGACA
                                                                                                                                                                                                                                                                                                                                                                             GAGAAAGATGGGCGAATGTTCCAGGCTGGTGTGAGCTGGGGTGAAGGCTGCGCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGAACAAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCAC
                                                                                                                                                                                                            2019 ccadacaccraccararitiriticanacacadaacacaararaagaraacaacacaca
                                                                                                                                                                                                                                                                                                   ACAAAAGAGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCCTCAGTGGGGTGTGCACTCCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                  CCTGATGCTACCCATGTCTTCCCTGCCAAGGCCATCTGGGTCACAGGCTGGGGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1553;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 701.2; DB 4;
Pred. No. 1.2e-177;
0; Mismatches 351;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          serine proteases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 10, Application US/09280116A Patent No. 6331427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2739 AACACAACCCAGACTGTGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCAGAACATACACTGTGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
OTHER INFORMATION: trypsin-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ပဲ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 22.6%;
Best Local Similarity 71.1%;
Matches 1092; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ) OTHER INFORMATION: n = a, t, US-09-280-116-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc_feature
LOCATION: (1)..(1553)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: HOMO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 6
US-09-280-116-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEC ID NO 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2495
                                                                                                                                                                                                                                                                                                                         2319
                                                                                                                                                                                                                                                                                                                                                                                                            2079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2318
                                                                                                                                                        2259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                           임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Acedeciriceredecardaceacadadecadedea--Gaceeagagaracadadadee 1898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cecriciatralares de contra de la contra dela contra de la contra dela contra de la contra del contra de la contra de la contra de la contra del la contra d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTAGCGATGGCTCCGATGAGAAAAACTGTGACTGTGGGGCTGCGATCCTTTACCAAACAG 1898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTCGCGTGGTTGGTGGCACGAATGCGGACGAGGGGGAGTGGCCCTGGCAGGTGAGCCTC 1958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTCGTGTTGTTGGGGGCACGGATGCGGATGAGGGCGAGTGGCCCTGGCAGGAAAGCCTG 1722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1362
                                                                                                                         946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCTTGCTGGAGCTGGAGAAGTCGGTGGAGTACAGCACCGTCGTGCGCCCCCATCTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGTAGCGACGGCTCAGATGAGGACTGCGGACTGTGGGGCTGCGGTCATTCACGAGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACGGCCTTCCTGGGTCTGGACCAGAGCAAGCGCAGTGCCTCTGGGGTGCAGGAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGCTCAAGGCATCATCCACCCCTTCAATGACTTCACCTTCGACTATGACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTGCAGCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGACTACACGATGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGCTCAAACGTATCATCACCCACCCTTCCAATGATTCACCTTCGACTATGACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCCGGGGCAGTTCACGTGCCGCACGGGCGGTGTATCCGGAAGGAGCTGCGCTGTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCAATGGGAAGTGCCTCTCGAAAAGCCAGCAGCCATCGAATGGGAAGGACGACTGTGGGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGTCTGACGAGGCTTCATGTGACAGCGTGAATGTCGTCTTGCACCAAATATACCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 dcirecec-eactecaceaceacacacareacercaacirecacirecaaceceacec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTICACGIGCAAAAACCAGTICTGCAAGCCCCTCTTCTGGGTCTGTGACAGTCTCAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTIGTIGGGGACGGAAGTGACGAGGAGGCTGCAGCTGTCCTG-CTGGGAGTTTCAAGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCAATGGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1483 desticica descricita de constante de contrata de 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGCTGCCAAAATGGCCTCTGTCTGAGCAAGGGCAACCCTGAGTGTGATGGGAAGACGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTCGTACACGGACACCGGGTTCCTAGCTGAGTACCTCCTACGACTCCAACGACCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTICACGIGCAAGAGCAAGITICIGCAAG---CICITICIGGGICIGCGACAGIGIGAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ccaacaaccacarcheaaggrecechrcaarrichrerachecrecaecececere
                                                                                                                                                                                                                                                                                                                                                                         CAGTGGGCTCCTGCACCAAGGACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        crecededacreccandencracerendarcandencandenanaracrecendan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGTCCCAGTTCGTCGTCACCACCAACAACAAGATCACAGTTCGCTTCCACTCAGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCCAGGGATGTTCATGTGCAAGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACG
                                           GCCCCTACTATCCAGGCCACTACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTCCCAGTTTGTGGTGAGCAGCAACAGCAAGATTACAGTCCACTTCCATTCTGATC
                                                                                       CCAACAACGGAACGTGAAGGTGCGCTTCAAACTCTTCTATCTGGTGGACCCCAACGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.423
                                                                                                                                                                                                                              1180
                                                                                                                                                                                                                                                                                                            947
                                                                                                                                                                                                                                                                                                                                                                                               1240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1300
                                                                                                                                           887
                                                            1120
```

1136 CTCGCTTCCTCGAAGTGGAGCTGGGAGGTACAAGGGAAGGACACTGGTGGTTCCCCTCAGGCCTGGTGGTTCCCCTCAGGCCTGGTGGTTCCCCTCTCCCCTCTCGGTGGTTGGT	OY 2970 TCACTCTTTTCAGGAAGCGCCCAGGAACCCCCAGAAAAGAGGTGCTAAGGCTG Db 1376 CCACGCTCTTGAGGAAGCCCAGGCTCGGAGAACCAGAAACGGGTCTGAGGCTG QY 3030 AAATTGTTTTGCTGTTGCCCAGGCTGGGTATTTGAGGTTAAA Db 1436 AAATTGTTTTTACCAGTCCAGGGTGGGTATTTGTGTAAAA QY 3072 ACATTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	.aa	558518684	; TYPE: DNA ; ORGANISM: Homo sapien ; ORGANISM: Homo sapien US-09-702-705-1480 Query Match Best Local Similarity 82.1%; Pred. No. 2e-72; Matches 353; Conservative 0; Mismatches 77; Indels 0; Gaps	Oy 1083 GGCGGCTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCCTACTATCCAGGCCACTAC
61 GGCTCCGACGAGGCCTNCTGCCCCAAGGTGAACGTTGTTGTACCAAACACCTTAC	1957 TCCACGCCCTGGGCCACGGGCCACTTGTGTGGGGGCCTCGCTCATCTCTCCTGACTGGCTGG	1337 TGAAGCTCAAAAGTACTCACCCTCCTTCAATGATTTCACCTTCGACTATGACA 2196 481 GCAGGCTCAACGCTTCCCCCCCTTCTTCAATGACTTCACCTTCGACTATGACA 2196 481 GCAGGCTCAACGCATCATCTCCCACCTTCCACTTCGACTATGACA 540 2197 TCGCCTTGCTGGAGAAAGTCGGTGGAGTACAAGCACGCTCGTGCGCCCCATCTGCC 226 541 TCGCCTTGCTGGAGAAAACGGCAGAATACAGATCAACTCCATGGTGCGCCCATCTGCC 600 2257 TGCCTGATGCTCCATGTCTCCCTGCTGGAGAAAACGGCAAGACTCGAGGCCATCTGGCC 226 1 1 1 1 1 1 1 1 1	2317 ACACAAAAAAGAGGAGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCA 2376 661 ACACCCAGTATGGAGGCACTGGCGGCTGATCCTGCAAAAGGGTGAGATCCGGGTCATCA 720 2377 ACCAGACCACCTGTGAGGACCTCATGCCGCAGCAGA-TCACCCCACGAATGATGTGTGTG 2435 721 ACCAGACCACCTGCGAGAACTCCTGCCGCAGCAGA-TCACCCCACGAATGATGTGTGTG 2435 721 ACCAGACCACCTGCGAGAACTCCTGCCGCGCAGCAGCCGCCGCGCATGATGTGTGTG	2496 GCGGAGAAAGATGGCGGAATGTTCCAGGCTGGTGAGGCTGGGGTGAAGCTGCGCT 2555	CRCACTGGGGTATAGCAGCATGGACAGCCGACCACAAACACCCCACAGGGATGCCGG

us-09-900-751-1.rni

```
Sequence 107, Application US/09280116A
Patent No. 6331427
GENERAL INFORMATION:
APPLICANT: Robison, Keith E.
TITLE OF INTENTION: Nucleic Acid Molecules Encoding Human Protease Homologs
FILE REPERBNCE: 5800-24, 035800/176965
CURRENT APPLICATION NUMBER: US/09/280,116A
CURRENT FILMG DATE: 1999-03-26
NUMBER OF SEQ ID NOS: 268
SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1804 GCAAGGGCAACCCTGAGTGTGATGGGAAGACGGACTGTAGCGATGGCTCCGATGAGAAAA 1863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1984 GIGGGGCCTCGCTCATCTCCTGACTGGCTGGTCTCTGCAGCTCATTGCTTTCAGGATG 2043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2164 CTTCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTGCTGGAGCTGGAGAAGTCGG 2223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2224 TGGAGTACAGCACCGTCGTGCCCCCATCTGCCTGCTGATGCTACCCATGTCTTCCCTG 2283
                                              361 Acadecidarancesandenscriederienenrescriedecidenteracidades
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         337 GTGGGGGGCCCTCATCGCTGACCGCTGGGTGATAACAGCTGCCCACTGCTTCCAGGAGG 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           106 GCCAGGAAGGGGTGCCATGTGGGACTTCACCTTCCAGTGTGAGGACCGGAGCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              166 AGAAGCCCAACCGCAGTGTGATGGGCGGCCCGACTGCAGGGACGGCTCGGATGAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 226 Achendacrichedecenedagecerreca----geedearrentegregagereren
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1924 CGGACGAGGCGAGTGGCCCTGGCAGGTGAGCCTCCACGCCCTGGGCCAGGGCCACCTTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      280 CCTCCGAGGGTGAGTGGCCATGGCAGCCTCCAGGTTCGGGGTC---GACACATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2044 ACAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCCTTCCTGGGTCTGCTGGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         397 ACAGCA-----TGGCCTCCACGTGCTGTGGACCGTGTTCCTGGGCAAGGTGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2104 AGAGCAAGCGCAGTGCCTCTGGGGTGCAGGAGCTGAAGCTCAAACGTATCATCACCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                448 AGAACTCGCGCTG---GCCTGGAGAGGTGTCTTCAAGGTGAGCCGCCTGCTCCTGCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               505 CGTACCACGAAGAGGACATGACTACGACGTGCTGCTGCTGCTGCTCGACCCCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 796;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 173.2; DB 4;
Pred. No. 1.4e-36;
0; Mismatches 269;
      1443 ACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: trypsin-like serine proteases FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    t, corg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 57.7%;
Matches 395; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc_feature
| LOCATION: (1)...(796)
| OTHER INFORMATION: n = a,
US-09-280-116-107
                                                                                           AGTGATGAGC 1512
                                                                                                                                 AGCGATGAGC 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens
                                                                                                                                                                                              SULT 9
-09-280-116-107
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 107
LENGTH: 796
                                                                                         1503
                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
                                          Вb
                                                                                         ò
                                                                                                                             Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                CTAGCTGAGTACCTCCTACGACTCCAACGACCCGTGCCCAGGGATGTTCATGTGCAAG 1442
                                                                                                                                                                   1443 ACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGGGCAGACTGCCCCGGATTAT 1502
AACAGCAGCAAGATTACAGTCCACTTCCATTCTGATCACTCGTACACGGACACCGGGTTC 1382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGCTTCAAACTCTTCTATCTGGTGGACCCCAACGTACCAGTGGGCTCCTGCACCAAGGAC 1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGGGTCCCCAGTTTGTGGTGAGCAGC 1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AACAGCAGCAAGATTACAGTCCACTTCCATTCTGATCACTCGTACACGGACACCGGGTTC 1382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1383 CTAGCTGAGTACCTCCTACGACTCCAACGACCCGTGCCCAGGGATGTTCATGTGCAAG 1442
                                      241 AACAGCAACAAGATCACAGTTCGCTTCCACTCAGATCAGTCCTACACCGACACCGGCTTC 300
                                                                                                                        TTAGCTGAATACCTCTCCTACGACTCCAGTGACCCATGCCCGGGGCAGTTCACGTGCCGC 360
                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301 TTAGCTGAATACCTCTCCTACGACTCCAGTGACCCATGCCCGGGGCAGTTCACGTGCCGC 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCACCAACATTGACTGCACATTGAGGTGCCCAACAACAACAGTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121 cácricaaaricriciacciácridaaaccicaacaracciacaaacacciáccicaaagaac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACAGCAACAAGATCACAGTTCGCTTCCACTCAGATCAGTCCTACACCGACACCGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 deadeccertraceraaacceaacaacarreaacaccecracraccaaccecare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181 TACGIGGAGAICAAIGGGGAGAAAIACIGCGGAGAGGAGGICCCAGIICGICGICACCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1083 GGCGGCTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCCTACTATCCAGGCCACTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER FILE REPREBENCE: 210121.478C15
CURRENT APPLICATION NUMBER: US/09/736,457
CURRENT FILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 1864
SOFTWARE: FASTSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 434;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9.9%; Score 306.8; DB 4; Length 82.1%; Pred. No. 2e-72; Live 0; Mismatches 77; Indels
                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1480, Application US/09736457
Patent No. 6509448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wang, Tongtong
Bangur, Chaitanya S.
Lodes, Michael A.
Fanger, Gary
Vedvick, Tom
Carter, Darrick
Retter, Marc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 82.1
Matches 353; Conservative
                                                                                                                                                                                                                                                   1503 AGTGATGAGC 1512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mannion, Jane
Fan, Liqun
Wang, Ajjun
                                                                                                                                                                                                                                                                                            AGCGATGAGC 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INCORMATION:
APPLICANT: Wang, Ton:
APPLICANT: Bangur, Cl
APPLICANT: Fanger, Gi
APPLICANT: Fanger, Gi
APPLICANT: Carter, Di
APPLICANT: Carter, Di
APPLICANT: Retrer, Ma
APPLICANT: Retrer, Ma
APPLICANT: Fan, Liqun
APPLICANT: Fan, Liqun
APPLICANT: Fan, Liqun
APPLICANT: Fan, Liqun
                                                                                                                                                                                                                                                                                                                                                                                 US-09-736-457-1480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-736-457-1480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 1480
                                                                                                                                                                                                           361
1323
                                                                                1383
                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                   g
                                                                                                                    a
                                                                                                                                                                 à
                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
à
                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
```

4

1923

1983

336

2103

564

624

us-09-900-751-1.rni

2553

```
CGGGCTACCTGACGGGTGACGGTGACAGCTGCCAGGGGGGACAGCGGGGGGGCCCCTGGTGT 1362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCAGAGGAACAAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAG 2613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1325 GGTGACGCCTCCCCTGTCCTGAACCACGCGGCCGTCCCTTTGATTTCCAACAAGATCTGC 1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1385 AACCACAGGGACGTGTACGGTGGCATCATCTCCCCCTCCATGCTCTGCGCGGGGCTACCTG 1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1445 Acadendacendakonachdeekadadakaaceddaddaceekanaaranaakada 1504
                     ---GGACCTCATGCCGCAGCAGATCACCCCACGAATGATGTGTG
                                                                                                                                                                                                                                                                                                                                    GCGCGGAGAAAGATGGGCGAATGTTCCAGGCTGGTGTGGTGAGCTGGGGGTGAAGGCTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                    GTCAAGAGAGGCTGTGGAAGTT---AGTGGGAGCGACCAGCTTTGGCATCGGCTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2211 CTGGAGAAGTCGGTGGAGTACAGCACCGTCGTGCGCCCCATCTGCCTGGTGGTGCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2445 AGTGGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGCGGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2151 ATCATCACCCACCCTTCCTTCAATGATTTCACCTTTCGACTATGACATCGCCTTGCTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1145 ATTGTCTACCACAGCAAGTACAAGCCAAAGAGGCTGGGCAATGACATCGCCCTTATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2271 CATGICTICCCIGCTGCCAAGGCCATCTGGGTCACAGGCTGGGGGCACACAAAAGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1265 GAGAACTTCCCCGATGCAAAAGTGTGCTGCACGTCAGGATGGGGGCCACAGAGGATGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACCACCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: O'Brien, Timothy J.
APPLICANT: O'Brien, Timothy J.
APPLICANT: Underwood, Lowell J.
TITLE OF INVENTION: Transmembrane Serine Protease Overexpressed
TITLE OF INVENTION: In Ovarian Carcinoma and Uses Thereof
FILE REFERENCE: D6192CIP
CURRENT APPLICATION NUMBER: US/09/518,046
CURRENT FILING DATE: 2000-03-02
EARLIER APPLICATION NUMBER: 09/261,416
EARLIER FILING DATE: 1999-03-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: entire cDNA sequence of TADG-12 variant gene
US-09-518-046-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 2544;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 3.5%; Score 109.8; DB 3; Length Best Local Similarity 54.6%; Pred. No. 2.3e-19; Matches 266; Conservative 0; Mismatches 212; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3, Application US/09518046
Patent No. 6294663
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1480 AGCAGATGGAGAGACC 1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCACACTGGGGTATAGC
                AGACCACCTGTGA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-518-046-3
            2380
                                                                                                                                                                                                                                                                                                                                    2494
                                                                                                                                                                                                                                                                                                                                                                                                                    1363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2614
                                                                                                                                                                        2434
                                                                                                                                                                                                                                                        1303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH:
                                                                   g
                                                                                                                                                                    ò
                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1122
    ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1900 CTCGCGTGGTTGGTGGCACGAATGCGGACGAGGGCGAGTGGCCCTGGCAGGTGAGCCTCC 1959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAGITICCCTG-----inggacaarccagcccarcccacticgragaag---- 1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGAIGCTACCCATGICTICCCTGCTGGCAAGGCCATCTGGGTCACAGGCTGGGGGACA 2319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1123 CCAACTCTGAAGAACTTCCCCGATGGAAAGTGTGCTGGACGTCAGGATGGGGGGCCA 1182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAAAAGAGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACC 2379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1183 CAGAGGATGGAGGTGACGCCTCCCTGTCCTGAACCACGCGGCCGTCCCTTGATTTCCA 1242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        906
                                                                                                                                                                                                                                       685 ACGCTCTGCAGAAGTGGATGTGCANTTGATCCCACAGGACCTGTGCAGCGAGGTCTATC 744
                                                                       ccedecrecacrecheantaceacredececerrececeaeaecececarcaeca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGCAGCTCATTGCTTTCAGGATGACAAAATTTTCAAGTACTCAGACTACACGATGTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2080 CGGCCTTCCTGGGTCTGCTGGACCAGAGCAAGCGCAGTGCCTCTGGGGTGCAGGAGCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1063 ccerrardaadcridecegeceacreacerreangaargaargaarceagecrererecege
                                                                                                                                                           TGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACCACCTGTGAGGACCTCATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                790 CACGCATCGTGGGTGGAACATGTCCTTGCTCGCAGTGGCCCTGGCAGGCCAGCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                850 AGTICCAGGGCTA---CCACCIGIGCGGGGCTCIGICATCACGCCCCTGIGGATCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       907 criccidedacaterraria de contra d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2140 AGCTCAAACGTATCATCACCCACCCTTCCAATGATTTCACCTTCGACTATGACATCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               36; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-518-046-1
Sequence 1, Application US/09518046
Sequence 1, Application US/09518046
Sequence 1, Application US/09518046
Sequence 1, Colored 1, Colored
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 2413;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              , OTHER INFORMATION: entire CDNA sequence of TADG-12 gene US-09-518-046-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 3.7%; Score 113.6; DB 3; Best Local Similarity 52.6%; Pred. No. 2.1e-20; Matches 388; Conservative 0; Mismatches 314;
                                                                                                                                                                                                                                                                                                                   2404 CGCAGCAGATCACCCCACGAATGAT 2428
                                                                                                                                                                                                                                                                                                                                                                                                       GCTACCAGGTGACGCCACGCATGCT 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2413
2284
                                                                           625
                                                                                                                                                           2344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2320
                                                                                                                                                                                                                                                                                                                                                                                                       745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH:
                                                                                                                                                                                                                               d
                                                                   g
                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
à
                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ΩD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

Gaps

```
967 GGAGCCGGATACCAAG-TAGAAAAGTGATTTCTCATCCAAATTATGACTCCAAGACCAA 1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1026 GAACAATGACATTGCGCTGATGAAGCTGCAGAAGCCTCTGACTTTCAACGACCTAGTGAA 1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2306 AGGCTGGGGGCACACAAAAGAGGGGGGTA-----CCGGGAGCGCTGATCCTGCAGAAGGG 2359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2540 GGGTGAAGGCTGCGCTCAGAGGAACAAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCG 2599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1383 GGGTTCTGGCTGTGCCAAAGCTTACAGACCAGGAGTGTACGGGAATGTGATGGTATTCAC 1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1326 AGGGCCTCTGGTCACTTCGAAGAACAATATCTG---GTGGCTGATAGGGGGTACAAGCTG 1382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1946 GCAGGIGAGCCICCACGCCCTGGGCCAGGCCACTTGTGTGTGGGGCCTCGCTCATCTCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2006 IGACIGGCIGGICTCTGCAGCICATIGCTTTCAGGAIGACAAAATTTCAAGIACTCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                      1886 CTTTACCAAACAGGCTCGCGTGGTTGGTGGCACGAATGCGGACGAGGGCGAGTGGCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                807 GCAGGTCAGCCTGCACGTCCAGAAC -- GTCCACGTGTGCGGAGGCTCCATCATCACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2066 CTACACGATGTGGACGGCCTTCCTGGGTCTGCACCAGAGCAAGCGCAGTGCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       918 GCAT-----TGGACGCATTTGCGGGGATTTTGAGA-----CAATCTTTCATGTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2186 CGACTATGACATCGCCTTGCTGGAGCTGGAGAAGTCGGTGGAGTACAGCACCGTCGTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1266 AGCCATGATCTGTGCCGGCTTCCTGCAGGGAACGTCGATTCTTGCCAGGGTGACAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2246 CCCCATCTGCCTGCCTGCTACCCATGTCTTCCCTGCTGGCAAGGCCATCTGGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1086 ACCAGIGIGICIGCCCAACCCAGGCATGAIGCIGCAGCCAGAACAGCTCTGCIGGAITTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2360 TGAGATCCGTGTCATCAACCAGACCACCTGTGAGGACCTCATGCCGCAGCAGCAGATCACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1146 CGGGTGGGGGCCACCGAGGAGAAGGGAAGACCTCAGAAGTGCTGAACGCTGCCAAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1206 GCTTCTCATTGAGACACAGAGATGCAACAGCAGATATGTCTATGACAACCTGATCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2420 ACGAAIGAIGIGIGIGIGGGITTICCTCAGIGGGGGIGIGGACTCCTGCCAGGGIGACTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2480 TGGCCCCTTGTCAAGCGCGGAGAAAGATGGGCGAATGTTCCAGGCTGGTGTGTGAGCTG
                                                                                                                                                                                                                     This base can be T or A with T being the more common allele. The codon will change from Phe Ile
                                                                                                        be C or T with C being the more . This is a silent polymorphism
This base can be C or T with C being the more common allele. This is a silent polymorphism
                                                                                                                                                                                                                                                                                                                                Score 101.6; DB 3;
Pred. No. 2.7e-17;
0; Mismatches 324;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1443 GGACTGGATTTATCGACAAATGAGGCGGA 1472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGACTGGATCAAAGAGCACACTGGGGTATA 2629
                                                                                                          This base can be common allele.
                                                                                                                                                                                                                                                                                                                                   3.3%;
                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 52.8<sup>th</sup>
Matches 396; Conservative
                                                                               LOCATION: (834)
OTHER INPORMATION: OTHER INPORMATION: or
FEATURE: NAME/KEY: allele
LOCATION: (625)
OTHER INFORMATION: COTHER INFORMATION: COTHER INFORMATION: COTHER INFORMATION: COTHER INFORMATION: COTHER INFORMATION: I
OTHER INFORMATION:
OTHER INFORMATION:
                                       FEATURE:
NAME/KEY: allele
                                                                                                                                                                                                                                                                                  US-09-342-749-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                     AGGCTGTGGAAGTT---AGTGGGAGCGACCAGCTTTGGCATCGGCTGCGCAGGGTGAAC 1561
                                                                                                                                           1562 AAGCCTGGGGTGTACACCCGTGTCACCTCCTTCCTGGACTGGATCCACGAGCAGATGGAG
             GATGGGCGAATGTTCCAGGCTGGTGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: conflict
LOCATION: (1471)
OTHER INFORMATION: Listed as A in Genbank Accession No. 6166194 U75329.
                                                                                                   AAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: (985)
OTHER INFORMATION: Listed as C in GenBank Accession No. 6166194 U75329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C in GenBank Accession No. 6166194 U75329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GenBank Accession No. 6166194 U75329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This base can be C or T with C being the more common allele. The codon is unaffected with both alleles encoding Gly.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              the more
from Val
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: Listed as T in GenBank Accession NO. U75329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This base can be G or A with G being common allele. The codon will change Met.
                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Wong, Alexander K.C.
APPLICANT: Wong, Alexander K.C.
APPLICANT: Tavtigian, Sean V.
APPLICANT: Tavtigian, Sean V.
APPLICANT: Myriad Genetics, Inc.
TITLE OF INVENTION: TMPRSS2 is a Tumor Suppressor
FILE REFRENCE: 2318-202
CURRENT FILING DATE: 1999-06-29
EARLIER APPLICATION NUMBER: US 60/091,044
EARLIER FILING DATE: 1998-06-29
NUMBER OF SEQ ID NOS: 33
SOFTWARE: PATENTIN VOY: 2.0
                                                                                                                                                                                                                                                                                                                                              Sequence 1, Application US/09342749
Patent No. 6166194
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Listed as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCATION: (1466)
OTHER INFORMATION: Listed
                                                                                                                                                                                                                                   1622 AGAGACC 1628
                                                                                                                                                                                       2625 GTATAGC 2631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (1) .. (1476)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: conflict
LOCATION: (1347)
OTHER INFORMATION: L
FEATURE:
NAME/KEY: conflict
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: allele
LOCATION: (478)
OTHER INFORMATION: T)
OTHER INFORMATION: CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION: (777)
OTHER INFORMATION: T
OTHER INFORMATION: C
OTHER INFORMATION: a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: conflict
LOCATION: (724)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: conflict
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE:
NAME/KEY: allele
LOCATION: (768)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 1479
                                                                                                                                                                                                                                                                                                                         US-09-342-749-1
             2505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION:
FEATURE:
                                                       1505
                                                                                                   2565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 1
                                                                                                                                      셤
                                                     g
                                                                                                 à
                                                                                                                                                                                     \delta
             à
```

1205 2419 1265

2005

806

7;

Gaps

30;

Length 1479; Indels

to

2065

863

2185

```
2006 TGACTGGCTGGTCTCTGCAGTTGCTTTCAGGATGACAAAATTTCAAGTACTCAGA 2065
                                                                                                                                                                                                                                                                     967 GGAGCCGGATACCAAG-TAGAAAAGTGATTTCTCATCCAAATTATGACTCCAAGACCAA 1025
                                                                                                                                                                                                                                                                                                                                                                   2186 CGACTATGACATCGCCTTGCTGGAGCTGGAGATCGGTGGAGTACAGCACCGTCGTGCG 2245
                                                                                                                                                                                                                                                                                                                                                                                                                 1026 GAACAATGACATTGCGCTGATGAAGCTGCAGAAGCCTCTGACTTTCAACGACCTAGTGAA 1085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1146 cecericecedeceneceadadadadecenecadadecenecenecedadecenecedaden 1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1206 GCTTCTCATTGAGACACAGAGATGCAACAGCAGATATGTCTATGACAACCTGATCACACC 1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2480 IGGCCCCTIGICAAGCGCGGAGAAAGAIGGCGAAIGIICCAGGCIGGIGIGGGGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1326 AGGGCCTCTGGTCACTTCGAAGAACAATATCTG---GTGGCTGATAGGGGGATACAAGCTG 1382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2540 GGGTGAAGGCTGCGCTCAGAGGAACAAGCCAGGCGTGTACACAAAGGCTCCCTGTAGTTCG 2599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1383 GGGTTCTGGCTGTCCAAAGCTTACAGACCAGGAGTGTACGGGAATGTGATGGTATTCAC 1442
807 GCAGGTCAGCCTGCACGTCCAGAAC---GTCCACGTGTGCGGAGGCTCCATCATCACCCC 863
                                                                                                                       864 CGAGTGGATCGTGACAGCCGCCACTGC----GTGGAAAACCTCTTAACAATCCATG 917
                                                                                                                                                                                                                     918 GCAT-----TGGACGCATTTGCGGGGATTTTGAGA-----CAATCTTTCATGTTCTAT 966
                                                                                                                                                                       2066 CTACACGAIGIGGACGCCTICCTGGGTCTGCTGGACCAGAGCAAGCGCAGTGCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2246 CCCCATCTGCCTGCCTGATGCTACCCATGTCTTCCCTGCTGGCAAGGCCATCTGGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1086 ACCAGTGTGTCTGCCCAACCCAGGCATGATGCTGCAGCCAGAACAGCTCTGCTGGATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2306 AGGCTGGGGGCACACAAAAGAGGGAGGTA-----CCGGAGCGCTGATCCTGCAGAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2420 ACGAATGATGTGTGTGTTTCCTCAGTGGGGGTGTGGACTCCTGCCAGGGTGACTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1266 AGCCATGATCTGTGCCGGCTTCCTGCAGGGAACGTCGATTCTTGCCAGGGTGACAGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2360 TGAGATCCGTGTCATCAACCAGACCTGTGAGGACCTCATGCCGCAGCAGATCACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: MAST CELL PROTEASE PEPTIDE TITLE OF INVENTION: INHIBITORS NUMBER OF SEQUENCES: 65 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: FastSEC for Windows Version 2.0 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/016,366A
FILING DATE: January 30, 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2600 GGACTGGATCAAAGAGCACACTGGGGTATA 2629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1443 GGACTGGATTTATCGACAAATGAGGGCAGA 1472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .С.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3: Wolf, Greenfield & Sacks,
600 Atlantic Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-016-366A-20
Sequence 20, Application US/09016366A
Patent No. 5955431
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Richard L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COMPATIBLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chifu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Stevens, APPLICANT: Huang, C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM COM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RY: U.S.A.
02210-2211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDARTS COLUMN STREET: COLUMN STREET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE: M2
COUNTRY:
                                                                                                                    g
                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        q
                                                                       à
                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1886 CITTACCAAACAGGCTCGCGTGGTTGGTGGCAAATGCGGACGAGGGCGAGTGGCCTG 1945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1946 GCAGGTGAGCCTCCACGCCCTGGGCCAGGGCCACTTGTGTGGGGCCTCGCTCATCTCTCC 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               747 CTCAAGCCGCCAGAGCAGGATCGTGGGCGGCGAGAGCGCGTCCCCGGGGGCCTGG 806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               to Ile
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: Listed as A in GenBank Accession No. 6444419 U75329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: Listed as C in GenBank Accession No. 644419 U75329 NAME/KEY: conflict
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: Listed as C in GenBank Accession No. 6444419 U75329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: Listed as A in GenBank Accession No. 6444419 U75329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                This base can be C or T with C being the more common allele. The codon is unaffected with both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This base can be T or A with T being the more common allele. The codon will change from Phe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the more
from Val
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This base can be C or T with C being the more common allele. This is a silent polymorphism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This base can be C or T with C being the more common allele. This is a silent polymorphism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.3%; Score 101.6; DB 4; Length 1479; 52.8%; Pred. No. 2.7e-17; ive 0; Mismatches 324; Indels 30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: Listed as T in GenBank Accession NO. U75329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This base can be G or A with G being common allele. The codon will change
            Sequence 1, Application US/09691840
Patent No. 644419
GENERAL INFORMATION
GENERAL INFORMATION:
GENERAL TROUGH, APPLICANT: Wong, Alexander K.C.
APPLICANT: Teng, DAvid H.-F.
APPLICANT: Peng, DAvid H.-F.
APPLICANT: Myriad Genetics, Inc.
TITLE OF INVENTION: TWRRSS2 is a Tumor Suppressor
FILE REFERENCE: 2318-202
                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US/09/691,840
PRIOR FILING DATE: 2000-10-18
PRIOR FILING DATE: 1999-06-29
PRIOR APPLICATION NUMBER: US 60/091,044
PRIOR FILING DATE: 1998-06-29
NUMBER OF SEQ ID NOS: 33
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/691,840 CURRENT FILING DATE: 2000-10-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       common allele. The alleles encoding Gly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: This base can b OTHER INFORMATION: common allele.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCATION: (1)..(1476)
NAME/KEY: conflict
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best_Local Similarity
Matches 396; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: (478)
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION:
INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: conflict
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: conflict
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: conflict
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (1466)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: CDS
LOCATION: (1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-691-840-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER
OTHER
```

à g ò

```
2017 TCTCTGCAGCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGACTACACGATGT 2076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2137 TGAAGCTCAAACGTATCATCACCCACCCTTCCTTCAATGATTTCACCTTCGACTATGACA 2196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               303 TGCCGGTCAGCAGGATCATCGTGCACCAGAGTTCTACACCGCCCAGATCGGAGCGGACA 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             87 GCATCGTTGGGGGCTCAGGAGCCCCCAGGAGCAAGTGGCCCTGGCAGGTGAGCCTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            147 TCCACGGCCCATACTGGATGCACTTCTGCGGGGGCTCCCTCATCCACCCCCCAGTGGGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2077 GGACGGCCTTCCTGGGTCTGCTGGACCAGAGCGCAGTGCCTCTGGGGTGCAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1903 GCGTGGTTGGTGGCACGAATGCGGACGAGGGCGAGTGGCCCTGGCAGGTGAGCC----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           243 ATCTGGCCGCCCTCAGGGTGCAACTGCGGGAGCAGCACCTCTACTACCAGGACCAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 1128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              207 TGACCGCAGCGCACTGCGTGGGACCGCACGTCAA------
                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROTEASE THAT CLEAVES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 3.3%; Score 101.2; DB 2; Best Local Similarity 53.1%; Pred. No. 3.1e-17; Matches 394; Conservative 0; Mismatches 288;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:
APPLICATION DATA:
APPLICATION NUMBER: US/08/978,404B
FILING DATE: 25-NOV-97
                                                                                                                                                                                                                                                                   Sequence 15, Application US/08978404B
Patent No. 5968782
GENERAL INFORMATION:
TITLE OF INVENTION: MAST CELL PROTEASE TH
TITLE OF INVENTION: PIBRINOGEN
NUMBER OF SEQUENCES: 74
CORRESPONDENCE ADDRESS:
ADDRESSES: Wolf, Greenfield & Sacks, P.
STREET: 600 Atlantic Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: B0801/7090
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-720-3500
                2590 CTGTAGTTCGGGACTGGATCAA 2611
                                                                                  780 CCTACTACTTGGACTGGATCCA 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/032,354
FILING DATE: 04-DEC-1996
ATTORNEY/AGENT INFORMATION:
NAME: Plumer, Elizabeth R.
REGISTRATION NUMBER: 36,637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM Compatible OPERATING SYSTEM: DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 1128 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: 617-720-2441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: U.S.A.
ZIP: 02210-2211
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                      US-08-978-404B-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE:
                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGACTCTGGTGGCCCCTTGTCAAGCGCGGAAAAAAGATGGCCGAATGTTCCAGGCTGGTG 2529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAACAAGCCAGGCGTGTACCAAAGGCTCC 2589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTCTGCAGCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGACTACACGATGT 2076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2077 GGACGGCCTTCCTGGGTCTGCTGGACCAGAGCGAAGCGCAGTGCCTCTGGGGTGCAAGGAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGAAGCTCAAACGTATCATCACCCACCCTTCCATTCAATGATTTCACCTTCGACTATGACA 2196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCCTGATGCTACCCATGTCTTCCCTGCTGGCAAGGCCATCTGGGTCACAGGCTGGGG-- 2314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       --GGACCTCATGCCGCAGCAGATC 2414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    redeceridenda de constante de la constante de 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        recccriectrasakasactricccccesesarecerecinesitascriesitascriesitascriesitas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGTCAGCTGGGGCGAGGGCTGTGCCCAGCCCAACCGGCCTGGCATCTACACCCGGTGTCA 779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            reccedricaccaeearcarcarecaccacaerricaacaeceaearceeagaeagaeaaacaaaaaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCATCGTTGGGGGTCAGGAGGCCCCCAGGAGCAAGTGGCCCTGGCCAGGTGAGCCTGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          147 rccacgeccearacrecarecacriciecesesescrecircarecececacacages
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ----GCACACAAAAGAGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCGCCTTGCTGGAGCTGGAGAGTCGGTGGAGTACAGCACCGTCGTGGCGCCCCATCTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 483 ATGTGGACAATGATGAGGCGCCTCCCACCGCCATTTCCTCTGAAGCAGGAGAAGTCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              543 TAATGGAAAACCACATTTGTGACGCAAAATACCACCTTGGCGCCTACACGGGAGACGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCCCACGAATGATGTGT-----GTGGGTTTCCTCAGTGGGGGTGTGGACTCCTGCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  603 TCCGCATCGTCGTGACGACGACGTGTGTGCCGGGAACACCCGGAGGGACTCATGCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       243 ATCTGGCCGCCCTCAGGGTGCAACTGCGGGAGCAGCACCTCTACTACTACCAGGACCAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCGACTCCGGAGGCCCCCTGGTGTGCAAGGTGA---ATGGCACCTGGCTGCAGGCGGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1903 GCGIGGITGGIGGCACGAAIGCGGACGAGGGCGCGAGTGGCCCIGGCAGGIGAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          90;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 2; Length 1128;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 3.3%; Score 101.2; DB 2; Length 1 Best Local Similarity 53.1%; Pred. No. 3.1e-17; Matches 394; Conservative 0; Mismatches 288; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       207 reaccecacicacicacicacaccecacicaa
                                                                                                                                                                                         NAME: Plumer, Elizabeth R.
REGISTRATION NUMBER: 36,637
REFERNEC/DOCKET NUMBER: B0801/7093
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-720-3500
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/037,090
FILLING DATE: 05-FEB-1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCATCAACCAGACCACCTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
LENGTH: 1128 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 617-720-2441
TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-016-366A-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 423
```

g ð à

임

1956

2016

à Б

g à g à d

à

2136

Search completed: February 21, 2004, 07:15:18 Job time: 193 secs

Sequence 1, Sequence 3,

```
Sequence 1, Appli
Sequence 968, App
                                                                                                               February 21, 2004, 05:28:33 ; Search time 1052 Seconds (without alignments) 10875.821 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                       Sequence 49,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1,
Sequence 3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Can2 6/ptodata/1/pubpna/US07 PUBCOMB.seq:*
| Can2 6/ptodata/1/pubpna/US07 PUBCOMB.seq:*
| Can2 6/ptodata/1/pubpna/US06 FUBF PUB.seq:*
| Can2 6/ptodata/1/pubpna/US06 FUBF PUB.seq:*
| Can2 6/ptodata/1/pubpna/US07 PUBCOMB.seq:*
| Can2 6/ptodata/1/pubpna/DS07 PUBCOMB.seq:*
| Can2 6/ptodata/1/pubpna/US08 PUBCOMB.seq:*
| Can2 6/ptodata/1/pubpna/US08 PUBCOMB.seq:*
| Can2 6/ptodata/1/pubpna/US08 PUBCOMB.seq:*
| Can2 6/ptodata/1/pubpna/US09 NEW PUB.seq:*
| Can2 6/ptodata/1/pubpna/US08 NEW PUB.seq:*
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-295-027-968

US-09-776-191-1

US-09-776-191-49

US-10-147-211A-1

US-10-147-211A-1

US-10-147-211A-1

US-10-147-211A-1

US-10-190-030B-1

US-10-190-030B-1

US-10-267-219-1

US-10-302-840A-1

US-10-302-840A-1

US-10-112-221A-1

US-10-112-221A-1
                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                          2449703 seqs, 1841816367 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-900-751-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Published_Applications_NA:*
                                                                         - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                  Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                    Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                 US-09-900-751-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3147
3147
3147
3147
3147
                                                                                                                                                                                                                                                                               IDENTITY NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.00
600.8
600.6
600.6
600.6
600.6
600.6
600.6
600.6
                                                                                                                                                                                                                    3106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6:
77:
77:
110:
111:
112:
114:
115:
116:
116:
                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1883.2
1883.2
1883.2
1883.2
1883.2
1883.2
1883.2
1883.2
1883.2
1883.2
1883.2
1883.2
                                                                                                                                                                                                                    Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1889.8
                                                                           OM nucleic
                                                                                                                                                                                                                                          Sequence:
                                                                                                                                                                                                                                                                                                                                        Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1111111
1284001011111
                                                                                                                 Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ñ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Result
```

```
Sequence 351, App
Sequence 111, App
Sequence 14 Appl
Sequence 35415, A
Sequence 1480, Ap
                                                                                                                                                                                                                                                                                      Sequence 1503, Ap
Sequence 554, Ap
Sequence 9, Appli
Sequence 7, Appli
Sequence 7, Appli
Sequence 170, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGCTCTCTAGGACTTCGGCGCGGGAC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 170,
Sequence 170,
Sequence 170,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 CATGGTAGACGGCTGCCCGGAGGACCACGCGTCTGAGACCGGCGATCGGACCGCCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATGGTAGACGGCTGCCCGGAGGGACCACGCGTCTGAGACCGGCGATCGGACCGCCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                        Sequence 1
                                                                  Sequence 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 9; Length 3106;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1, Application US/09900751
; Sequence 1, Application US/09900751
; Patent No. US2002002653A1
; Patent No. US2002002653A1
; APPLICANT: Allen, Keith D
; APPLICANT: Leviten Michael W
; TITLE OF INVENTION: TRANSGENIC MICE CONTAINING SERINE
; TITLE OF INVENTION: PROTEASE GENE DISRUPTIONS
; FILE REFERENCE: R-36
; CURRENT PILLING DATE: 2001-07-06
; PRIOR APPLICATION NUMBER: US 60/217,449
; PRIOR PELING DATE: 2000-08-07
; PRIOR PELING DATE: 2000-08-07
; PRIOR FILING DATE: 2000-08-07
; PRIOR FILING DATE: 2000-08-07
; PRIOR FILING DATE: 2000-08-07
; NUMBER OF SEQ. ID NOS: 4
; SOFTWARE FESTSEE FOR Windows Version 4.0
                                                                             US-09-225-301-351

US-10-097-340-311

US-10-097-340-311

US-10-097-340-311

US-09-918-995-35415

US-09-918-941-1480

US-09-845-626-1480

US-09-845-626-1480

US-09-845-626-1480

US-09-867-701-5310

US-09-867-701-5310

US-09-915-343-1503

US-09-915-343-1503

US-09-916-214A-7

US-09-776-191-9

US-09-776-191-9

US-09-776-191-9

US-09-776-191-9

US-09-776-191-0

US-09-976-101-70

US-09-976-101-70

US-09-978-192A-170

US-09-978-192A-170

US-09-978-192A-170

US-09-978-189-170

US-09-978-189-170

US-09-978-189-170

US-09-978-189-170

US-09-978-189-170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -09-978-564A-170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -09-978-403A-170
  US-10-104-271-1
US-10-104-271-3
US-10-099-700A-1
US-10-099-700A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 3106;
100.0%; Pred. No. 0;
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 100.
Matches 3106; Conservative
                                                            225

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

40110

4011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Mus musculus
    SEQ ID NO 1
LENGTH: 3106
1883.2
1883.2
1883.2
1883.2
1559.2
1532.4
556.4
                                                                                                                                                               223339992223399529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-900-751-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-900-751-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
    711110
711110
711110
711110
711110
711110
711110
711110
711110
711110
711110
711110
711110
711110
711110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
```

Appli Appli Appli Appli Appli

Sequence

3147

3147

Sequence

Sequence Sequence

Appli Appli Appli Appli Appli

Sequence 3 Sequence 3 Sequence 3

Sequence

8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

120	2281 CTGCTGGCAAGGCCATCTGGGTCACAGGCTGGGGGCACACAAAAGAGGAGGGGGGG 2340
品格	δλ
121 TCAAGTACAAACTCCCCCCTAAGAACAACAACAACGCTTTCAACACCCCCTCCCCCCCC	+1

8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

GAALACITGACGACATTTATGCTTGTGGGCCTCCCCCCCCACACACA

Gaps

5.

- See File Wrapper or PALM

82

169 142 229 202 289 262

```
290 GIGGCACTICCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTGAGGAT 349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       263 GTGGCATTTGCAGTACCGGGACGTGCGTCTCCAGAAGGTCTTCAATGGCTACATGAGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCCAGCCAGCTGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTGGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCTGAGTTCAGCATCCCGCAGCACCTGGTGGAGGAGGCCGAGCGCGTCATGGCCGAGGA
                                                                                                                                                                                                                                                                                                                           GACCGCCAAAACCAIGGGIAGCAATCGGGGCCGCAAGGCCGGAGGGGCTCTCAGGACTT
                                                                                                                                                                                                                                                                                                                                                                                                             Geccirceses de la reservación de description de la contra de contra de la contra dela contra de la contra dela contra de la contra del la contra del la contra de la contra del la co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               83 CGGCGCGGGACTCAAGTACAACTCCCGGCACGAGAAAGTGAATGGCTTGGAGGAAGGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAAGAAAGCGAGGCCCCCAGGCGCTGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCACAGAGTTTATCAGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   383 GGCCAGCAAGGTGAAGGACGCGCTGAAGCTGCTGTACAGCGGAGTCCCCATTCCTGGGCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTACCACACAGAGICGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTACTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            443 CTACCACAAGGAGTCGGCTGTGACGGCCTTCAGCGAGGGCAGCGTCATCGCCTACTACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTCAGAGTTCAGCATCCCCCCACACACCAGAAGAAGAGGTTGATCGCGCCATGGCTGTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCGAGTTGTAACATTGCCACCCCGAGCACGGCACTGAAATCCTTCGTGCTAACATCTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 12; Length 3149;
                                                                                                                                                                                                                                                 504; Indels
                                                                                                                                                       Ouery Match 60.8%; Score 1889.8;
Best Local Similarity 81.4%; Pred. No. 0;
Matches 2222; Conservative 0; Mismatches
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-295-027-968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   530 (
                                                                                                                                                                                                                                                                                                                                                                                                             23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       590
                                                                                                                                                                                                                                                                                                                                                                                                    Ω
                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ωþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ਨੋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 968, Application US/10295027
Publication No. US20030232350A1
GENERAL INFORMATION:
APPLICANT: Aziz, Natasha
APPLICANT: Gish, Kurt C.
APPLICANT: Glah, Kurt C.
APPLICANT: Mevezi, Peter A.
APPLICANT: Mevezi, Peter A.
APPLICANT: Matson, Susan R.
APPLICANT: Watson, Susan R.
APPLICANT: Watson, Susan R.
APPLICANT: Wethord G.
APPLICANT: Wethord G.
APPLICANT: Wethord G.
APPLICANT: Wethord G.
APPLICANT: Methods of Diagnosis of Cancer, Compositions and TITLE OF INVENTION: Methods of Exceening for Modulators of Cancer FILE REFERENCE: 018501-012500US
```

-10-295-027-968

322 409 469 442 529 502 589

382

649

8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

qq

중 음

1730 GGCTTCATGTGACAGCGTGAATGTCGTCTCTTGCACCAAATATACCTACC	1703 1790 1763	1850 CTCCGATGAGAAAAACTGTGACTGTGGGATCCTTTACCAAACAGGCTCGCTGGT 1909 	1910 TGGTGGCACGAATGCGGACGAGGCGAGTGGCCTGGCAAGTCAAGCCTCCACGCCCTGGG 1969 	1970 CCAGGGCCACTTGTGTGGGGCCTCGCTCATCTCCTGACTGGCTGG	2030 TIGCTITCAGGAIGACAAAATITCAAGIACTCAGACTACACGAIGIGGACGGCCTITCT 2089	2090 GGSTCTGCTGGACCAGAGCAGTGCCTCTGGGGTGCAGGAGCTGAAGCTCAAACG 2149 [2150 TATCATCACCCACCTTCCTTCATGATTTCACCTTCGACTATGACATCGCCTTGCTGGA 2209	2210 GCTGGAGAAGTCGGTGGAGTACAGCGTCGTGCGCCCCATCTGCCTGC	2270 CCATGTCTTCCCTGCTGGCARCTGGGTCACAGGGGGGGGCACACAAAAGAGG 2329	2330 AGGTACCGGAGCGCTGATCCTGCAGAGGTGAGATCCGTGTCATCAACCAGACCACCTG 2389	2330 TGAGGACCTCATGCCGCAGCATCACCCCACGAATGATGTGTGTG	2450 GGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGAGAAAGATGG 2509	2510 GCGAAIGTICCAGGCIGGIGGIGGIGGAGCIGGAAGGCIGCGCICAGAGGAACAAGCC 2569 [2570 AGGCGTGTACACACGCTCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGGGTATA 2629	2630 GCAGCATGGACAGCCGACCACAAACACCCACAGGGATGCCGACATGCACACCTGG 2689 2603 GGGGCGGGGGCCACCCAAATGTGTACACCTGCGGGGCCACCATCGTCCACCCAGT 2659	2690 ATACAGGAGGAGCACTTGAGCTGTGGGCCTCCCCCCCCACACACCCC 2749	2750 GACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
ď	og S	& a	ନ ର	oy da	oy Q	QY Db	Qy Db	රු යු	S S	Qy Dp	y da	<i>8</i>	ර් සි	<i>장</i> 옵	පි පි	yo, da	Sp. Sy.
563 GGGGTAGTCATGCTGCCCCGGGGGGGGCTCCCTGAAGTCCTTTGTGGGTCACCTCAGT 622 650 GGTGGCCTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAGACA			CTGGT 	GGCAC GCAC GCAC	ACGCT ACACT		TACTA		1190 GAACGTGAAGGTGCGCTTCAAACTCTTCTATCTGGTGGACCCCAACGTAGGGGGCTC 1249		racac racac				1550 CAAAAACCAGTICTGCAAGCCCCTCTTCTGGGTCTGTGACGACTGTCAACGACTGTGGGGA 1609 		1670 GTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGATGGGTCTGACGA 1729

424

544 644 704 664 764 724

```
CAGITICATICATCACCAGCAACAAGAICACAGITICACITICACTCAGAICAGITICA 1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TACACGGACACCGGGTTCCTAGCTGAGTACCTCTACGACTCCAACGACCGCGTGCCCA 1424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TACACCGACACGGGCTTCTTAGCTGAATACCTCCTACGACTCAGTGACCCATGCCCG 1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGATGTTCATGTGCAAGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGG 1484
785 GTGCTGAGCCTCACCTTCCGCAGCTTTGACCTTGCGTCCTGCGACGACGACGACCAGCGACGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACACTGATAACCAACACTGAGGGGGGGGGTTCCCGGCTTTGAGGCCACCTTCTTCCAGCTG
                                                                                                                                                                                                                                              TACTIGGTCAGAGTTCAGCATCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCATGGCT
                                                                                                                                                                                                                                                                                                            485 TACTGGTCTGAGTTCAGCATCCCGCAGCACCTGGTGGAGGAGGCCCGAGCCCGTCATGGCC
                                                                                                                                                                                                                                                                                                                                                                                GTGGAGCGAGTTGTAACATTGCCACCCCGAGCACGGGCACTGAAATCCTTCGTGCTAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGGAGCGCCTAGTCATGCTGCCCCCCCGGGCGCCTCCTTCGAAGTCCTTTGTGGTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCAGTGGTGGCTTTCCCCACGGACTCCAAAACAGTACAGAGGACCCAGGACAACAGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  665 AGCTTTGGCCTGCACGCCCGCGGTGTGAAGCTGATGCGCTTCACCACGCCCGGCTTCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         765 AACAGICCCIACCCGGCGCAIGCCCGCIGCCAGIGGGICCIGCGGGGGACGCCGACICI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACAGCCCTACCCCGCTCATGCCCGCTGCCAGTGGGCCCTGCGGGGGGACGCCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGCTGAGCCTCACCTTCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCACCTTCTCACCTCCTACAACCTGACTTTCCTCCTCCCCAGAACGTCTTCCTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACGCTGATAACCAATACTGACCGGCGACATCCTGGCTTTGAGGCCACTTTCTTCCAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TACTATCCAGGCCACTACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1085 TACTACCCAGGCCACTACCCAACATTGACTGCACATGGAACATTGAGGTGCCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AACCGGAACGTGAAGGTGCGCTTCAAACTCTTCTATCTGGTGGACCCCCAACGTACCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1145 AACCAGCATGTGAAGGTGAGCTTCAAATTCTTACTGCTGGAGCCCGGCGTGCCTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGITIGIGGIGAGCAGCAGCAGCAGAITACAGICCACITCCATICTGAICACICG
                                                                                                     GGTCCCTACCACAAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTAC
                                                                                                                                                                      GGCCCCTACCACAAGGAGTCGGCTGTGACGGCCTTCAGCGAGGGCAGCGTCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTGTGGTGGCCTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTITIGCCCTGCATGCCCATGGTGCAGCAGTGACGCTTCACTACCCCTGGCTTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGTCACCGTGTATGATAGCCTGAGCCCCATGGAACCCCACGCTGTGGTGCTGCTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     845 CTGGTGACGGTGTACAACACCCTGAGCCCCATGGAGCCCCACGCCCTGGTGCAGTTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCACCTACCCTCCTTACAACCTGACCTTCCACTCCTCCCAGAACGTCCTGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCAAGATGAGCAGCTGTGGCGCCTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTAGGATGAGCAGCTGTGGAGGCCCCTTACGTAAAGCCCCAGGGGACATTCAACAGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCTCCTGCACCAAGGACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGAGTCC
                                                                                                                                                                         425 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                     545 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   705 1
                                       365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1365
                                                                                                        465
                                                                                                                                                                                                                                              525
                                                                                                                                                                                                                                                                                                                                                                                585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           905
                                                                                                     ð
                                                                                                                                                                      셤
                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                 쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                     ### GENERAL INFORMATION NO. US2030119168A1

| PUBLICANT: BAWIN L. Madison | APPLICANT: Edgar O. Ong | APPLICANT: Corvas International, Inc. | Inc. | APPLICANT: Corvas International, Inc. | ITILE OF INVENTION: NUCLEUES ENCODING | ITILE OF INVENTION: METHODS BASED THEREON | ITILE OF INVENTION: METHODS BASED THEREON | ITILE OF INVENTION: METHODS BASED THEREON | ITILE OF INVENTION NUMBER: 60/213, 124 | PRIOR APPLICATION NUMBER: 60/213, 124 | PRIOR APPLICATION NUMBER: 60/234, 840 | PRIOR APPLICATION NUMBER: 60/134, 840 | PRIOR PLILING DATE: 2000-06-22 | PRIOR PLILING DATE: 2000-06-23 | PRIOR PLILING DATE: 2000-06-23 | PRIOR PLILING DATE: 2000-02-08 | PRIOR PLILING DATE: 2000-02-18 | PRIOR PLILING DATE: 2000-02-08 | PRIOR PL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGGTGTGGCATTTGCAGTACCGGGACGTGCGTGTCCAGAAGGTCTTCAATGGCTACATG 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTTTATC 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGATCACAAATGAGAATTTTGTGGATGCCTACGAGAACTCCAACTCCACTGAGTTTGTA 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCCTGGCCAGCCAGGTGAAGGAGGCGCTGAAGGTGCTGTACAATGAAGTCCCTGTCCTG 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACTTCGGCGCGCGCACTCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACTICGGCGCGGGACTCAAGIACAACTCCCGGCACGAGAAAGIGACTIGGAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAGTCTTCAATGGCCATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 45 GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGCTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAGCGAAGGCCCCCAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       reserversecretecrearcescricitariosecricitarios de la resecutación de la
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCGTGGAGTTCCTGCCAGTCAACATCAAGAAGGTGGAAAAGCATGGCCCGGGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 3147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       508; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1883.2; 1
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: Nucleotide encoding MTSP1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: (23)...(2589)
PUBLICATION INFORMATION:
AUTHORS: 0'Brien, T.J. and Tanimoto, H.
DATABASE ACCESSION NUMBER: Genbank AR081724
PATENT DOCUMENT VINBER: US Pat 5972616
PATENT FILING DATE: 1999-02-20
PUBLICATION DATE: 1999-10-26
                                                                                          Sequence 1, Application US/09776191
Publication No. US20030119168A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 60.6%;
Best Local Similarity 81.2%;
Matches 2223; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-776-191-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 рp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Пb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          \delta
```

1004

964

944

844

824

784 884 1124 1084 1184 1144

임

à 임 à a a Пb

õ

g

ò

셤 δ qq à g

 δ

g à d

ਨੋ

PP

ð g δ

ò

엄

셤 δ d à g ö 쉼 $\dot{\circ}$ 쉽 ò

à

```
APPLICANT: Edgar O. Ong
APPLICANT: Edgar O. Ong
APPLICANT: Giunn-Chern Yeh
APPLICANT: Giunn-Chern Yeh
APPLICANT: Oxivas International, Inc.
ITILE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING
ITILE OF INVENTION: METHODS BASED THEREON
ITILE OF INVENTION: MUMBER: 60/234,840
PRIOR APPLICATION NUMBER: 60/234,840
PRIOR FILING DATE: 2000-06-22
PRIOR FILING DATE: 2000-06-22
PRIOR FILING DATE: 2000-02-03
PRIOR FILING DATE: 2000-02-03
PRIOR FILING DATE: 2000-02-03
PRIOR FILING DATE: 2000-02-08
                             GTATAGCAGCATGGACAGACCAGACCACAAACACCCACAGGGATGCCCGACATGCACA 2684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            45 GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGCTCTCAG 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           105 GACTTCGGCGCGCGCACTCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAG 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   185 TGGGTGGTGCTGGCAGCCGTGCTGATCGGCCTCCTCTTGGTCTTGCTGGGGATCGGCTTC 244
                                                                                                                                                                    2585 GTATAGGGGCCGGG---GCCACCCAATGTGTACACCTGCGGGGCCACCCATCGTCCAC
                                                                                                                       125 GGCGTGGAGTTCCTGCCAGTCAACAACGTCAAGAAGGTGGAAAAGCATGGCCCGGGGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      65 GACTTCGGCGCGCGGACTCCAAGTACAACTCCCGGCACAGAAAGTGAATGGCTTGGAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       165 GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAAGCGAGGCCCCAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: CDS

1 LOCATION: (1865)...(2590)

1 OTHER INFORMATION: Nucleic acid sequence of protease domain of MTSP1

US-09-776-191-49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 11; Length 3147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
60.6%; Score 1883.2; DB 11; Lengt
Best Local Similarity 81.2%; Pred. No. 0;
Matches 2223; Conservative 0; Mismatches 508; Indels
                                                                                                                                                                                                                    2745 ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
                                                                                                                                                                                                                                                                 2700 ACATACACTGTGAACTCAATCTCCAGGGCTCCAAAT 2735
                                                                                                                                                                                                                                                                                                                                                                                    Sequence 49, Application US/09776191
Publication No. US20030119168A1
                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Edwin L. Madison
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo Sapien
                                                                                                                                                                                                                                                                                                                                                             US-09-776-191-49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 49
                             2625
                                                                                                                       2685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGIH:
                                                                   원
                                                                                                                                                          g
                                                                                                                                                                                                                                                              d
                             ਨੇ
                                                                                                                     ò
                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                        1724
                                                                                                                                                                                                                                                                                                                                                                                                                                   1844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2564
GCCGACTGCACCGACCACAGCGATGAGCTCAACTGCGAGGCGGCGGCCACCAGTTC 1504
                                                                     2084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2464
                                                                                                                                                                                                                                                                                                                                  CTCAATGGGCTCTGGCTAGGGCAACCCTGAGTGTGACGGGAAGGAGGACTGTAGC 1804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTTGTTGGGGGCACGGATGCGGATGAGCGGGGTGGCCCTGGCAGGTAAGCCTGGCATGCT 1924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2525 AAGCCAGGCGTGTACACAAGGCTCCCTCTTTCGGGACTGGATCAAAGAGAACACTGGG 2584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2104
                                                                                                                                                                                                                                                                        GGGAAGTGCCTCTCGAAAAGCCAGCAGTGCAATGGGAAGGACGACTGTGGGGACGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGGACGGAAGTGACGAGGAGGGCTGCAGCTGTCCTGCTGGGAGTTTCAAGTGTTCCAAT
                                                                                                                                                                                                                                     GGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGATGGGTCT
                                                                                                                                                                                                                                                                                                                                                                               GACGAGGCCTCCTGCCCCAAGGTGAACGTCGTCACTTGTACCAAACACACCTACCGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                            CAAAATGGCCTCTGTCTGAGCAAGGGCAACCCTGAGTGTGATGGGAAGACGGACTGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATGGCTCCGATGAGAAAAACTGTGAGCTGCGATCCTTTACCAAACAGGCTCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGGTTGGTGGCACGAATGCGGACGAGGGCGAGTGGCCCTGGCCAGGTGAGCCTCCACGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TICCTGGGTCTGCACCAGAGCAAGCGCAGTGCCTCTGGGGTGCAGGAGCTGAAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCTTGGGCTTGCACGACCAGGCGCAGCGCCCTGGGGTGCAGGAGCGCAGGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTGGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGAGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCGGCGGCGTGGACTCCTGCCAGGGTGATTCCGGGGGACCCCTGTCCAGCGTGGAGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCACACTGCTACATCGATGACAGAGGATTCAGGTACTCAGACCCCACGCAGTGGACGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAACGTATCACCCACCCTTCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTACCCATGTCCTTCCCTGCTGGCAAGGCCATCTGGGTCACAGGCTGGGGGCCACAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATGGGCGAATGTTCCAGGCTGGTGTGAGCTGGGGGTGAAGGCTGAGGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATGGGCGGATCTTCCAGGCCGGTGTGGTGAGCTGGGGAGGCGCTGCGCTCAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TATGGAGGCACTGGCGCGCTGATCCTGCAAAGGGTGAGATCCGCGTCATCAACCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2405
1445
                                                                                         1505
                                                                                                                                      1605
                                                                                                                                                                                      1565
                                                                                                                                                                                                                                                                                  1625
                                                                                                                                                                                                                                                                                                                               1725
                                                                                                                                                                                                                                                                                                                                                                               1685
                                                                                                                                                                                                                                                                                                                                                                                                                              1785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2565
                                                                                                                                                                                                                                     1665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2165
                                               1545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2265
```

'n

124 224 184 284

1425 GGGATGTTCATGTGCAAGACTGGACGCATCCGAAAGGAACTGCGCTGCGACGGCTGG	1485	1545 ACGIGCAAAACCAGTICTGCAAGCCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGT 1604	1605 GGGGACGGAAGTGACGAGGCTGCAGCTGCTGCTGCGGAGTTTCAAGTGTTCCAAT 1664	1625 GGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGATGGGTCT 1724	1725 GACGAGGCTTCATGTGACGTGAATGTCGTCTTTGCACCAAATATACCTGCCGCTGC 1784	1785 CAAAATGGCCTCTGTCTGAGCAAGGCAACCCTGAGTGATGAGAAGACGGACTGTAGC 1844 1745 CTCAATGGGCTCTGCTTGAGCAAGGGCAACCTGAGTGTGACGGAAGGAGGACTGTAGC 1804	1845 GATGGCTCGGATGAGAAAACTGTGACTGTGGGCTGCGATCCTTTACCAAACAGGCTGG 1904	1905 GTGGTTGGTGGCACGAATGCGGACGAGGGGCGAGCCCTGGCAGGTGAGCCTCCACGCC 1964	1965 CTGGGCCAGGGCCACTTGTGTGGGGCCTCGCTCATCTCTCTGACTGGCTGG	2025 GCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCC 2084	2085 TICCIGGGTCTGCTGGACCAGAGCAGTGCCTCTGGGGTGCCAGAGCTCAAGCTC 2144	2145 AAACGTATCATCACCCTTCCTTCAATGATTTCACCTTCGACTATGACTATGACTTTG 2204	2205 CTGGAGCTGGAGAAGTCGGTGGAGTACAGCACCGTCGTGCGCCCCATCTGCCTGC	2265 GCTACCCANGTCTTCCCTGCTGGCAAGGCCATCTGGGTCACAGGCTGGGGGGCACACAAAA 2324	2325 GAGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACC 2384	2385 ACCTGTGAGGACCTCATGCCGCAGCACATCACCCCACGAATGATGTGTGTG	2445 AGTGGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCTTGTCAAGCGCGGAGAAA 2504
Š.	8 & 8	& 43	क व	පි ර	ර් සි	 S 4	B &	ත් ත්	B 6	장 염	YQ.	Qy Dp	PP O	5 A	Qy Dp	čč qa	Qy Db
								 , _					_	<u> </u>			
CIGGIGIGGCATTIGCAGIACGGGACGTGTGTCCAGAAGGTCTTCAAIGGCTACAIG 304 AGGAICACAAATGAGATCTTTCTGGATGGGTATGAGAACTCCACCTCCACAGAGTTTAIC 404	AGGATCACAATGAAATTTTGTGGATGCCTAAAGAAAATCCCAAATGTATGT					AGTITIGCCTGCATGCCATGGTGCAGCAGGCTTCACTACCCCTGGCTTCCCC 764											

285 CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG 344 245 CTGTGTGTGGCACTTCCAGTACCGGACGTGCTGTCCAGAAGTCTTCAATGGCCATCTG 314 245 CTGTGTGTGGAATTTGCAGTACCGTGTGTCCAGAAGTCTTCAATGGCTACATG 3104 345 AGGATCACAAATGACATTTTGTGGATGCGTGTCACACTCCACCTCCACATG 3104 305 AGGATCACAAATGACAATTTGTGGATGCCTACACACTCCCACCTCCACATTGTA 364 405 AGCCTGGCCAGCAGGAGAGGCGCTGAAGCTGCTGTACAACTCCACACTCCTG 424 405 AGCCTGGCCAACAAAGAAGTCGAAGAGCGCTGAAGCTGCTGTACAACTCCTG 424 465 GGTCCCTACCACAAAAAGAAGTCGGCTGAAGCTGCTGTACAGTGCGAACTCCTG 424 465 GGTCCCTACCACAAAAAGAAGTCGGCTGTAACTCCTCTAAGAGGCAAGTCATCGCCTAC 524 465 GGCCCTACCACACAAAAGAAGTCGGCTGTAACTCCCTTCAGTGAAGGCAAGTCATCGCCTAC 484 525 TACTGGTCAAGAATCAACACACACACACACACACACACAC	565 GTGGAGGAGTTGTAACATTGCCACCCGAGGACTGAAATTCTTCGTGTACA 644 545 GAGGAGGCGAGTTACTCCCCCGAGGGCGCTCCTGAAGTTCTTTTGTGTACA 645 TTCTTGGTGGCTTACTCTCCCCCAGAGTGCTCCTGAAGTTCTTTTGTGTACA 645 TTCTTGTTGGTGGCTTTCCCCATTACATCAGAGGTGCTCTCTGGTACACAGCTGC 646 TTCTTGGTGGCTTTCCCCATTACACAGAGTGCTGC 647 TTCTTGGTGGCTTTCCCCCATTACACAGAGTGCTGC 648 AGTTTTGCCCTTCCCCATTGCCCCGAGAGTGCTGCTGCTTCTCT 725 AACAGTTCCTTCCCCCATTGCCCGGTGCAGAGCTGCTGCTGCTTCTCT 726 AACAGTTCCTTCCCCGGCGTTGTGAGCTGTGATGCCTTTCCCTTCTGGTTTCCCT 727 GACAGTTCCTTCCCCGGCGTTGAGAGCTGCTTGATGCTGCTGCTGCTGCTTTCCT 728 GACAGCTCTCTCCCGGCGTTTGAGTTCTGTTCTTTTCTT
8 6 8 6 8 6 8 6 8	8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6 8 6
QY 2505 GATGGGCGAATGTTCCAGGCTGGGGTGAAGGCTGCGCTCAGAGGAAC 2561 Db 2465 GATGGGCGGATCTTCCAGGCCGGTGAGGCGCTGAGGCGCTCAGAGGAAC 2524 QY 2565 AAGCCAGGCGTGTACACAGGTTCGGGACTGGATCAAGAGCACACTGGG 2524 QY 2525 AAGCCAGGCGTGTACACAAGGCTCCTGTTCGGGACTGGATCAAGAGACACTGGG 2584 QY 2525 AAGCCAGGCGTGTACACAAGACTCCTCTTTCGGACTTGGATCAAGAGACACTGGG 2584 QY 2525 AAGCCAGGCGTGTACACAAAGACACCCACAACACCCCACAAGACACCCACC	PENSULT S 195-10-14 POBLICATION: WAS CONTROLLED US/10147211A PENDING CALLON NO. US/1039900A1 PENDING CALLON NO. US/103990A1 APPLICANT: WAS CONTROLLED WAS CONTROLLED BENCODING A TRANSMEMBRANE SERINE PROTEASE 1 PENDING TAXAN PROPERTY. AND WESTER OF 1974/1/211A PRICE PLINE PRESENCE OF WINDOWS 124-01/47,211A PRICE PLINE DATE: 2002-05-14/40/14/211A PRICE PLINE DATE: 2002-05-16/14/211A PRICE PLINE DECENSION NUMBER: 60.6F; SORE 1883.2; DB 12; Length 3147; PRICE PLINE DECENSION NUMBER: 60.6F; SORE 1883.2; DB 12; Length 3147; PRICE PLINE DECENSION NUMBER: 60.6F; SORE 1883.2; DB 12; Length 3147; PRICE PLINE DECENSION NUMBER: 60.6F; SORE 1883.2; DB 12; Length 3147; PRICE PLINE DECENSION NUMBER: 60.6F; SORE 1883.2; DB 12; Length 3147; PRICE PLINE DECENSION NUMBER: 60.6F; SORE 1883.2; DB 12; Length 3147; PRICE PLINE DECENSION NUMBER: 60.6F; SORE 1883.2; DB 12; Length 3147; PRICE PLINE DECENSION NUMBER: 60.6F; SORE 1883.2; DB 12; Length 3147; PRICE PLINE DECENSION NUMBER: 60.6F; SORE 1883.2; DB 12; Length 3147; PRICE PLINE DECENSION NUMBER: 60.6F; SORE 1883.2; DB 12; Length 3147; PRICE PLINE DECENSION NUMBER: 60.6F; SORE 1883.2; DB 12; LENGTH 3147; PRICE PLINE DECENSION NUMBER: 60.6F; SORE 1883.2; DB 12; LENGTH 3147; PRICE PLINE DECENSION NUMBER: 60.6F; SORE 1883.2; DB 12; LENGTH 3147; PRICE PLINE DECENSION NUMBER: 60.6F; SORE 1883.2; DB 12; LENGTH 3147; PRICE PLINE PLINE DECENSION NUMBER: 60.6F; SORE 1883.2; DB 12; LENGTH 3147; PRICE PLINE PLIN

O

```
credrichedcarringchenhaceses cerefectrechenhagererrehandernenie 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 12;
                                                                                                                                                                                                                                                                                                            ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
                                                                                                                                                                                                                                                                                                                                           ACATACACTGTGAACTCTAATCTCCAGGGCTCCAAAT 2735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 60.6%; Score 1883.2; Best Local Similarity 81.2%; Pred. No. 0; Matches 2223; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KRY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                           US-10-147-211A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 3147
                  2405
                                                                                 2465
                                                                                                                                              2525
                                                                                                                                                                              2625
                                                                                                                                                                                                               2585
                                                                                                                                                                                                                                             2685
                                                                                                                                                                                                                                                                            2642
                                                                                                                                                                                                                                                                                                            2745
                                                                                                                                                                                                                                                                                                                                           2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    185
                                                 2505
                                                                                                                 2565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                   à
                                                                     g
                                                                                                    à
                                                                                                                                    Op
                                                                                                                                                                             8 G
                                                                                                                                                                                                                                 ď
                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2105 AAGCGCATCATCTCCCACCCCTTCTTCAATGACTTCACCTTCGACTATGACATCGCGCTG 2164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2285 TATGGAGGCACTGGCGCGCTGATCCTGCAAAAGGGTGAGATCCGCGTCATCAACCAGACC 2344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCTGTGAGGACCTCATGCCGCAGCAGATCACCCCACGAATGATGTGTGGGTTTCCTC 2444
                                                                                                                                                                                                                                                                                                                                                        GGGAAGTGCCTCTCGAAAAGCCAGCAGTGCAATGGGAAGGACGACTGTGGGGACGGGTCC 1684
                                                                                                                                                                                                                                                                                                                                                                                                                         GACGAGGCCTCCTGCCCCAAGGTGAACGTCGTCCTTGTACCAAACACACCTACCGCTGC 1744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATGGCTCCGATGAGAAAAACTGTGAGCTGTGGGCTGCGATCCTTTACCAAACAGGCTCGC 1904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CIGGGCCAGGGCCACITGTGTGTGGGGCCTCGCTCATCTCTCCTGACTGGCTGGTCTCTGCA 2024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1985 GCACACTGCTACATCGATGACAGAGGATTCAGGTACTCAGACCCCACGCCAGTGGACGGCC 2044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2045 Trecreserristaceaceaceaeceaeceaecececresesrecaesaececaesere 2104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAACGTATCATCACCCACCCTTCCTTCATGATTTTCACCTTCGACTATGACATCGCCTTG 2204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGAGCTGGAGAAGTCGGTGGAGTACAGCACCGTCGTGCGCCCCCATCTGCCTGAT 2264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTACCCATGTCTTCCCTGCTGGCAAGGCCATCTGGGTCACAGGCTGGGGGCACACAAAA 2324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACC 2384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2345 ACCTGCGAGAACCTCCTGCCGCAGCAGATCACGCCGCGCGATGATGTGCGTGGGCTTCCTC 2404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2445 AGTGGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAGCGCGGGAGAAA 2504
                              TACACCGACACGGCTTCTTAGCTGAATACCTCTCCTAGGACTCAGTGACCCATGCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    crededeadedeacarcrecedrecricercarcreceaacrederererere 1984
TACACGGACACCGGGTTCCTAGCTGAGTACCTCCTACGACTCCAACGACCCGTGCCCA 1424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTCCTGGGTCTGCTGGACCAGAGCGCAGTGCCTCTGGGGTGCAGGAGCTGAAGCTC
                                                                                   crcaarigagererieageaaagageaacereaagagagagagagagageereraace
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACGGCTCAGATGAGAAGGACTGCGACTGTGGGGCTGCGGTCATTCACGAGACAGGCTCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGGTTGGTGGCACGAATGCGGACGAGGGCGAGTGGCCCTGGCAGGTGAGCCTCCACGCC
                                                                                                                                                                                            ACGTGCAAAAACCAGTTCTGCAAGCCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGT
                                                                                                                                                                                                                           1505 ACGTGCAAGAACAAGTTCTGCAAGCCCCTCTTCTGGGTCTGCGACAGTGTGAACGACTGC
                                                                                                                                                                                                                                                           GGGGACGGAAGTGACGAGGAGGGCTGCAGCTGTCCTGCTGGGAGTTTCAAGTGTTCCAAT
                                                                                                                                                                                                                                                                                         ĠĠaĠaĊaacaĠcĠaċĠaĠĠaĠĠĠĠĠĠĠŢĠŢŢĠŢĊĠĠĊĊĊaĠaccŢŢĊaĠŢĠŢŢĊĊaaŢ
                                                                                                                                                                                                                                                                                                                          GGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGATGGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1785 CAAAATGGCCTCTGTCTGAGCAAGGGCAACCCTGAGTGTGATGGGAAGACGGACTGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1865 GTTGTTGGGGGCACGGATGCGGATGAGGCCGAGTGCCCCTGGCAGGTAAGCCTGCATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCC
                                                              GGGATGTTCATGTGCAAGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGG
                                                                                                                               2145 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2385
                                                                                                                           1485
                                                                                                                                                                                                                                                                                                                                                                                                                          1685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2265
                                                              1425
                                                                                               1385
                                                                                                                                                                                            1545
                                                                                                                                                                                                                                                                                         1565
                                                                                                                                                                                                                                                                                                                          1665
                                                                                                                                                                                                                                                                                                                                                          1625
                                                                                                                                                                                                                                                                                                                                                                                          1725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                            g
                                                                                                                                                                                                                                                                                        임
                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
à
                       g
                                                              ò
                                                                                           심
                                                                                                                           ò
                                                                                                                                                                                            à
                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ₽
```

Sequence 3, Application US/10147211A
Sequence 3, Application US/10147211A
Publication No. US20030235900A1
GENERAL INFORMATION:
TITLE OF INVENTION:
FULL OF INVENTION:
FULL COPINGENCE: 24745-1616
CURRENT APPLICATION NUMBER: US/10/147,211A
CURRENT APPLICATION NUMBER: 60/291,001
PRIOR APPLICATION NUMBER: 60/291,001
PRIOR APPLICATION NUMBER: 60/291,001
NUMBER OF SEQ ID NOS: 23
SOFTWARE: PRASEEQ for Windows Version 4.0
SEQ ID NO 3: 100 GTATAGGGGCCGGG---GCCACCCAAATGTGTGTACACCTGCGGGGCCACCCATCGTCCACC 2641 CCAGTGTGCACG-CCTGCAGGCTGGAGACTGGACCGCTGACTGCACCAGCGCCC-CCAGA 2699 Ę, 104 GACTTCGGCGCGGGACTCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAG 164 GGCGTGGAGTTCCTGCCAGTCAACATCAAGAAGGTGGAAAAGCATGGCCCCGGGGCGC 184 TGGGTGGTGCTGCCGTGCTGATCGGCCTCTCTTGGTCTTGCTGGGGATCGGCTTC 244 CIGGIGIGGCACTICCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG 344 GACTTCGGCGCGGGACTCAAGTACAACTCCGGCACGAGAAAGTGAATGGCTTGGAGGAA 124 GTATAGCAGCATGGACAGACAGCCGACCACAAACACCCCACAGGGATGCCCGACATGCACA GATGGGCGGATCTTCCAGGCCGGTGTGGGGAGGCGGGAGACGGCTGCGCTCAGAGGAAC AAGCCAGGCGTGTACACAAGGCTCCCTCTGTTTCGGGACTGGATCAAAGAGAACACTGGG GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCCGCAAGGCCGGAGGGGGCTCTCAG GAGCGCCTCGGGGTACCATGGGGAGCGATCGGGCCCCGCAAGGGCCGGAGGGGGCCCGAAG GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAAGCGAGGCCCCAGGCGC ; LOCATION: (1865)...(2590) ; OTHER INFORMATION: Nucleic acid sequence of protease domain of MTSP1 US-10-147-211A-3

1456 GGGANGTICANUTICANGAGATCACATCCGAAAGGACTCCCTCCTCCAACGGACTCCTCCAACGGACTCCCTCC	2505 GATGGGCGAATGTTCCAGGCTGGTGTGAGCTGGGGGTGAAGGCTGCGCTCAGAGGAAC 2564
2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	λŏ
15 MGANTOLOMATIONALTICIDATIOCOTATIONALTICALCIA ACTUATATO 101	1325 TACACCGACACCGGCTTCTTAGCTGAATACCTCTCCGACGCCCAGTGACCCCATGCCCG 1384

```
1085 TACTACCCAGGCCACTACCCACCCAACATTGACTGCACATTGAGGTGCCCAAC 1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACCGGAACGTGAAGGTGCGCTTCAAACTCTTCTTTGGTGGACGCCAACGTACCAGTG 1244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCTCCTGCACCAAGGACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGAGTCC 1304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCACCTGCCCCAAGGACTACGTGGAGATCAATGGGGAGAAATACTGCGGGAGAGAGGTCC 1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGITIGIGGIGAGCAGCAACAGCAGCAGAITACAGICCACTICCATICIGAICACTICG 1364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCACCTTCTCACCCTCCTACAACCTGACTTTCCTCTCCTCCCAGAACGTCTTCCTTGTC 1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACGCTGATAACCAATACTGACCGGCGACATCCTGGCTTTGAGGCCACTTTCTTCCAGCTG 1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               965 ACACTGATAACCAACACTGAGCGGCGGCATCCCGGCTTTGAGGCCACCTTCTTCCAGCTG 1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCAAGATGAGCAGCTGTGGCGGCTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCC 1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ceraggardadeagereredadeeceerraceraageeceageseacriceacaeece 1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACTATCCAGGCCACTACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAAC 1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AACCAGCATGTGAAGGTGAGCTTCAAATTCTTCTACCTGCTGGAGCCCGGCGTGCCTGCG 1204
                                                                                                                                                                 404
                                                                                                                                                                                                                                                                         464
                                                                                                                                                                                                                                                                                                                                                                              524
                                                                                                                                                                                                                                                                                                                                                                                                                    704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    904
                                                                                                                                                                                                                  AGGATCACAAATGAGAATTTTTGTGGATGCCTACGAGAACTCCAACTCCACTGAGTTTGTA 364
                                                                                                                                                                                                                                                                                                                       424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TACTGGTCTGAGGTTCAGCATCCCGCAGCACCTGGTGGAGGCCCGAGCGCGCGTCATGGCC 544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGGAGCGAGTTGTAACATTGCCACCCCGAGCACGGGCACTGAAATCCTTCGTGCTAACA 644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGTCACCGTGTATGATAGCCTGAGCCCCATGGAACCCCACGCTGTGGTGCGGCTGTGT 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCACCTACCTCCCTCCTACAACCTGACCTTCCACTCCTCCCAGAACGTCCTGCTCATC 964
          TGGGTGGTGCTGGCAGCCGTGCTGATCGGCCTCCTCTTGGTCTTGCTGGGGATCGGCTTC
                                                              CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG
                                                                                                                                                                                                                                                                                                                       AGOCTGGCCAGCAAGGTGAAGGACGCCTGAAGCTGCTGTACAGCGGAGTCCCATTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TACTGGTCAGAGTTCAGCATCCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTITIGCCCTGCATGCCCATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCTTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    665 AGCTTTGGCCTGCACGCCCCGCGGTGTGGAGCTGATGCGCTTCACCCACGCCCGGCTTCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACAGTCCCTACCCGGCGCATGCCCGCTGCCAGTGGGGTCCTGCGGGGGGGACGCCGACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gacadececeracecegereargecegeraceagragececraegagagagaececeaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGCTGAGCCTCACCTTCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGGAGAC
                                                                                                             crediterecentricaenaceeeacerecererecaenacerereange
                                                                                                                                                                 <u>AGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTTTATC</u>
                                                                                                                                                                                                                                                                                                                                                                           GGTCCCTACCACAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            readrigerecenteceaecaecrecaaaacagracagaeceaagaecaaecaecree
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTGTGGGGCCTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGTGACGGTGTACAACACCCTGAGCCCCATGGAGCCCCCACGCCCTGGTGCTGTGTGT
                                                                                                                                                                                                               305
                                                                                                                                                                                                                                                                                                                          365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1265
                                                            285
                                                                                                             245
                                                                                                                                                                 345
                                                                                                                                                                                                                                                                      405
                                                                                                                                                                                                                                                                                                                                                                           465
                                                                                                                                                                                                                                                                                                                                                                                                                               425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g___
                                                                                                  8 8 8
                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   P
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     슝
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                         à
                                                                                                                                                                                                                                                        ŏ
                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ор
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ♂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ℧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            UB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Edwin L. Madison
APPLICANT: Edwin L. Madison
APPLICANT: Joseph Edward Semple
APPLICANT: Joseph Edward Semple
APPLICANT: Scort Jeffrey Kemp
APPLICANT: Scort Jeffrey Kemp
APPLICANT: Daniel Vanna Siev
TITLE OF INVENTION: Thereof
FILE REFERENCE: 24745-1611
CURRENT APPLICATION NUMBER: US/10/156,214A
CURRENT APPLICATION NUMBER: US/23
NUMBER OF SEQ ID NOS: 611
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 1
                                                                                                                        AAGCCAGGCOTGTACACAAGGCTCCCTCTGTTTCGGGACTGGATCAAAGAGAACACTGGG 2584
2625 GTATAGCAGCATGGACAGCCGACCACAAACACCCACAGGGATGCCCGACATGCACA 2684
                                                                                                                                                                                                                                     2585 GTATAGGGGCCGGG----GCCACCCCAAATGTGTAACACTGCGGGGCCACCCATCGTCGACC 2641
                                                                                                                                                                                                                                                                                            ccadrardadace-cerdendedrigaadacradacradardadacradadacece-cenda 2699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACTTCGGCGCGGGACTCAAGTACAACTCCCGGCTAGAAACATGAATGGCTTTGAGGAG 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                45 GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGCTCTCAG 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACTICGGCGCGCGCGACTCAGTACAACTCCCGGCACGAGAAGTGAATGGCTTGGAGGAA 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               125 Gecerrecaerrecente de la contra del la contra del la contra del la contra del la contra de la contra de la contra de la contra del la contra del la contra de la contra de la contra del 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5 GAGCGGCCTCGGGGTACCATGGGGAGCGATCGGGCCCGCAAGGGCGGAGGGGCCCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAAGAGGGGCCCCAGGCGC
                                                                                  AAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 3147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 12;
                                                                                                                                                                                                                                                                                                                                                                                                    2745 ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
                                                                                                                                                                                                                                                                                                                                                                                                                                                     2700 ACATACACTGAGACTCAATCTCCAGGGCTCCAAAT 2735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               508;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: Nucleotide sequence encoding PUBLICATION INFORMATION:
AUTHORS: O'Brien, T.J. and Tanimoto, H.
DATABASE ACCESSION NUMBER: GenBank AR081724
DATABASE ENTRY DATE: 2000-08-31
PATENT POUMBEN NUMBER: US PAT 5972616
PATENT FILING DATE: 1998-02-20
PUBLICATION DATE: 1999-10-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60.6%; Score 1883.2; ilarity 81.2%; Pred. No. 0; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1, Application US/10156214A Publication No. US2004001801A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ... (2589)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 2223; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: CDS
LOCATION: (23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 3147
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; PUBLICATION |
US-10-156-214A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -10-156-214A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      225
                                                                                                                                   2525
                                                                                                                                                                                                                                                                                            2685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              165
                                2465
                                                                                  2565
                                                                                                                                                                                                                                                                                                                                                2642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                g
                                                                                                                                                                                 δ
                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                   임
                              임
                                                                               à
```

	LES ENCODI	JULIAN LINCKARALON: MUCLECLIDE SEQUENCE ENCOLING MISFL MULICATION IRPORMATION: AUTHORS: O'Brien, T.J. and Tanimoto, H. MATABASE ACCESSION NUMBER: Generank #AR081724 MATABASE ENTRY DATE: 2000-08-31 PATENT POCUMENT NUMBER: 5,972,616 PATENT PLING DATE: 1998-02-20 US-10-190-0308-1	Query Match 60.6%; Score 1883.2; DB 13; Length 3147; Best Local Similarity 81.2%; Pred. No. 0; As accessory As agos 3; Matches 2223; Conservative 0; Mismatches 508; Indels 5; Gaps 3; Qy 45 GATCGGACCGCCAAAACCATGGGTAGCAATCGGGCCGCAAGGCCCGCAAGGCCCCAAG 64 Bb 5 GACGGCTCCGGAGCCACAAGGCGCCCCAAG 64	GACTTCGGCGCGGGGACTCCAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAGGAGGACTTCGGCGGGGGGGG
13.65 TACACGGACACCGGGTTCCTAGCTGACTCCTACGACTCCCAACGACCCGTGCCCA 14.24	1725 GACGAGGCTTCATGTGACAGCGTGAATGTCGTCTTGCACCAAATATACCTACC	TICTIGGET CONTROLL OF THE PROPERTY OF THE PROP	2205 CTGGAGCTGGAGAAGTCGGTGGAGTACAGCACCGTCGGCCCCATCTGCCTGC	2325 GAGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACC 2384

POLYPEPTIDES AND

\$ a \$

qq

oy Ob g 2

8 8 8

92 OX

	1745 CTCAATGGGTCTGCTTGAGGTGCTGCTGATTGACGGGAGGAGGAGGACTGTACL 1804 1845 CATGGTCCGATGGAAAAACTGTGACTGGGCTGCGGTTCTTACCAAAAGGGCTCGC 1904 1805 GACGCTCAGTGAGACTGCGACTGTGGGCTGCGTTTACCAAAAAGGCTCGT 1864. 1805 GACGCTCAGTGAGACTGCGACTGGCTGGTCATTCACGAGACGCTCGT 1864. 1805 GACGCTCAGTGAGACGGAGCGCGAGTGCCCTTACCAGAGAGCTCGT 1964 1805 CTGGGCCCAGATGCGGATGAGGCCAGTGCCCTGGCAGTAACCTCCATCT 1924 1806 GTGGTTGGTGGCAGATGCGGATGAGGCCTGGCAGTAACCTCCATCT 1924 1806 CTGGGCCCAGATGCGGATGAGGCCAGTGCCTCTCTCCTCAGAGTAACCTCCATCTCTCCCAGGCAGTACTCTCTCCCAGGCAGG
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	6
•	
225 TGGGTGGTGCTGGTGGCTGTTCAGCTTCCTCTTGCTCTCCTCTTGGTCGGTTGC 284 185 TGGGTGGTGCTGGTGGCTGTTCAGCTTCCTTTGGTCTGGTCGGGTTC 244 285 CTGGTGTGGCAGCTTCCATTATCGGAATGTGCTGGTTCTCAGTGCTGGGGTTC 244 285 CTGGTGTGGCATTTCCAGTATCGGGTTCCAGAGTTCTCAATGGCCATCTG 314 245 CTGGTGTGGCATTTGCAGTTGCGGTTCCAGAGTTCTCAATGGCCATCATG 314 305 AGGATCACAAATGAGATTTTTGTGGATGCGTTGCAGAGTTCTCAATGGCTTACATG 314 405 AGCATCACAAATGAGATTTTTGTGGATGCGTATGAGAACTCCACACAGATTTATC 404 305 AGCATCACAAAATGAGATTTTTGTGGATGCGTATGAGAACTCCAACTCCACAGAGTTTATC 404 305 AGCCTGGCCAGCAGGTGAAGGAGGCGTTGAAGACTCCAACTCCACAGAGTTTATC 404 405 AGCCTGGCCAACAAATGAGAATTTTGTGGATGCGTAAGAGACTCCAACTCCACAGAGTTTATC 404 406 AGCCTGGCCAACAAATGAGAAGTCGAAGAGTGAAACTCCAACTCCAACTTTGTA 314 407 AGCCTGGCCAACAAAAAAAAAAAAAAAAAAAAAAAAAAA	

4 6 6 6 6 6 6 6 6 6

```
1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  964
                                        304
                                                                                                         404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                904
                                                                                                                                                                   364
                                                                                                                                                                                                                                       464
                                                                                                                                                                                                                                                                                                 424
                                                                                                                                                                                                                                                                                                                                                                                                                                  484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        784
245 CTGGTGTGGCATTTGCAGTACCGGGACGTGCGTGTCCAGAAGGTCTTCAATGGCTACAGA
                                                                                                                                                                                                                                                                                                                                                                                                          425 GGCCCCTACCACAAGGAGTCGGCTGTGACGGCCTTCAGCGAGGGCAGCGTCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1265 CAGTICGICGICACCAGCAACAAGAACAAGAICACAGTICGCIICCACTCAGAICAGICC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      305 AGGATCACAAATGAGAATTTTGTGGATGCCTACGAGAACTCCAACTCCACTGAGTTTGTA
                                                                                                                                                                                                                                405 AGCCTGGCCAGCCAGGTGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTG
                                                                                                                                                                                                                                                                                                    3 65 AGCCTGGCCAGCAAGGTGAAGGACGCGCTGAAGCTGCTGTACAGCGGGAGTCCCATTCCTG
                                                                                                                                                                                                                                                                                                                                                                     GGTCCCTACCACAAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TACTGGTCAGAGTTCAGCATCCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        485 TACTGGTCTGAGTTCAGCATCCCGCAGCACCTGGTGGAGGAGGCCGAGCCGCGTCATGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGGAGCGAGTTGTAACATTGCCACCCCGAGCACGGGCACTGAAATCCTTCGTGCTAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           545 GAGGAGCGCGTAGTCATGCTGCCCCCGGGGCGCGCTCCCTGAAGTCCTTTGTGGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGITITIGCCCTGCATGCCCATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCTTCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       665 AGCTTTGGCCTGCACGCCCGCGGTGTGGAGCTGATGCGCTTCACCACGCCCGGCTTCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACAGTCCCTACCCGGCGCGTTGCCCGCTGCCAGTGGGTCCTGCGGGGGGACGCCCGACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGCTGAGCCTCACCTTCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              785 GTGCTGAGCCTCACCTTCCGCAGCTTTGACCTTGCGTCCTGCGACGAGCGCGGCGGCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGTCACCGTGTATGATAGCCTGAGCCCCATGGAACCCCCACGCTGTGGTGCGCGCTGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGTGACGGTGTACAACACCCTGAGCCCCCATGGAGCCCCCACGCCCTGGTGCAGTTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCACCTTCTCACCCTCCTACAACCTGACTTTCCTCTCCTCCCAGAACGTCTTCCTTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  905 GGCACCTACCCTCCTACAACCTGACCTTCCACTCCTCCCAGAACGTCCTGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                965 Acactgaraaccaacacreaeceecearccceecrrreaeeccaccrrrcrrcraecre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TACTATICCAGGCCACTACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1085 TACTACCCAGGCCACTACCCACCATTGACTGCACATGGAACATTGAGGTGCCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCTCCTGCACCAAGGACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGAGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGITIGIGGIGAGCAGCAACAGCAGCAAGAITACAGICCACIICCAITCIGAICACICG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTGTGGGGCCTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            605 TCAGTGGTGGCTTTCCCCACGGACTCCAAAACAGTACAGAGGACCCAGGACAACAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1005 ACGCTGATAACCAATACTGACCGGCGACATCCTGGCTTTGAGGCCACTTTCTTCCAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1025 CCTAGGATGAGCAGCTGTGGAGGCCGCTTACGTAAAGCCCAGGGGGACATTCAACAGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACCGGAACGTGAAGGTGCGCTTCAAACTCTTCTATCTGGTGGACCCCCAACGTACCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCAAGATGAGCAGCTGTGGCGGCTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCC
                                                                                                      345
                                                                                                                                                                                                                                                                                                                                                                  465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     원
                                                                                                  ò
                                                                                                                                                            g
                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                  ₽
                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \overset{\ }{\diamond}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Madison, Edwin
APPLICANT: Madison, Edwin
APPLICANT: Madison, Edwin
APPLICANT: Ong, Edgar
TITLE OF INVENTION: TRANSMEMBRANE SERINE PROTEASE 20, THE ENCODED POLYPEPTIDES AND
TITLE OF INVENTION: METHODS BASED THEREON
FILE REFERENCE: 24745-1619
CURRENT APPLICATION NUMBER: US/10/190,030B
CURRENT FILING DATE: 2002-07-03
NUMBER OF SEQ ID NOS: 24
SOFTWARE: FASLESQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3,
2345 ACCTGCGAGAACCTCCTGCCGCAGCAGATCACGCCGCGCATGATGTGCGTGGGCTTCCTC 2404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGTGTGCCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 64
                                                                                                                                                                                                                                                                                                                                                                                         AAGCCAGGCGTGTACACAAGGCTCCCTCTGTTTCGGGACTGGATCAAAGAGAACACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACTTCGGCGCGGGACTCAAGTACAACTCCCCGGCACGAGAAAGTGAATGGCTTGGAAA
                                                                                                                                                                                                                                                                  GATGGGCGGATCTTCCAGGCCGGTGTGGTGAGCTGGGGGAGGACGGCTGCGCTCAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTATAGCAGCATGGACAGACAGCCGACCACAAACACCCCACAGGGATGCCCGACATGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTATAGGGGCCGGG---GCCACCCAATGTGTACACCTGCGGGCCACCCATCGTCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ccadreficcace-consciences de la consciención de la 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACTTCGGCGCGGGACTCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCGTGGAGTTCCTGCCAGTCAACAACGTCAAGAAGGTGGAAAAGCATGGCCCGGGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGGTGGTGCTGGCAGCCGTGCTGATCGGCCTCCTCTTGGTCTTGCTGGGGATCGGCTTC
                                                                AGTGGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCCCTTGTCAAGCGCGGAGAAA
                                                                                                                                 Addecedecerceacteces de de la constant de la constan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGGCTCTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAGCGAGGCCCCAGGCGC
                                                                                                                                                                                                  GATGGGCGAATGTTCCAGGCTGGTGTGTGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGCGCCTCGGGGTACCATGGGGAGCGATCGGGCCCGCAAGGGCCGGAGGGGGCCCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; LOCATION: (1865)...(2590)
; OTHER INFORMATION: Nucleic acid sequence of protease domain of MTSP1 US-10-190-030B-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 3147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         508; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACATACACTIGIAACTCAATCTCCAGGGCTCCAAAT 2735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 1883.2;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5-10-190-030B-3
Sequence 3, Application US/10190030B
Publication No. US2003013429BA1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 60.6%;
Best Local Similarity 81.2%;
Matches 2223; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Homo Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3147
                                                                                                                                                                                                                                                               2465
                                                                                                                                                                                                                                                                                                                                                                                                2525
                                                                                                                                                                                                                                                                                                                                                                                                                                                             2625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2745
                                                                    2445
                                                                                                                                                                                              2505
                                                                                                                                                                                                                                                                                                                               2565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        285
                                                                                                                                 2405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ਨ
ਨ
   g
                                                                                                                          <del>Q</del>Q
                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                      D
                                                                                                                                                                                                                                                                                                                                                                                                                                                ∂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                à
                                                                                                                                                                                           8
```

```
Best_Local Similarity 81.2
Matches 2223; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Homo Sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: CDS
LOCATION: (23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 1
LENGTH: 3147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-267-219-1
                   2505 (
                                                                                                        2525
                                                                            2565
                                                                                                                                     2625
                                                                                                                                                                                              2685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                              g
                                                                                                   Бþ
                                                                                                                                  ö
                                                                                                                                                               유
                                                                                                                                                                                                                       셤
                                                                           à
                                                                                                                                                                                            ਨੋ
                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2285 TATGGAGGCACTGGCGCCTGATCCTGCAAAAGGGTGAGATCCGCGTCATCAACCAGACC 2344
                                                                                                                                                                                                                                                                                             1625 GGGAAGTGCCTCTCGAAAAGCCAGCAGTGCAATGGGAAGGACGACTGTGGGGACGGGTCC 1684
                                                                                                                                                                                                                                                                                                                                                                                                                2105 AAGCGCATCATCTCCCACCCTTCTTCAATGACTTCACCTTCGACTATGACATCGCGCTG 2164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1325 TACACCGACACCGGCTTCTTAGCTGAATACCTCCCTACGACTCCAGTGACCCATGCCCG 1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTGGGGGTGTGGACTCTGCTGAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGAGAAA 2504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2405 AGCGGCGCGCGTGGACTCCTGCCAGGGTGATTCCGGGGACCCCTGTCCAGCGTGGAGGCG 2464
                                                                                                                                              ACGTGCAAAAACCAGTTCTGCAAGCCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGT
                                                                                                                                                                  1505 ACGIGCAAGAACAAGTICIGCAAGCCCCICITICIGGGICIGGGACAGIGIGAACGACIGC
                                                                                                                                                                                                         GGGGACGGAAGTGACGAGGAGGGCTGCAGCTGTCCTGGGAGTTTCAAGTGTTCCAAT
                                                                                                                                                                                                                                                                                                                          GACGAGGCTTCATGTGACAGCGTGAATGTCGTCTTTGCACCAAATATACCGTGC
                                                                                                                                                                                                                                                                                                                                                        1685 GACGAGGCCTCCTGCCCCAAGGTGAACGTCGTCACTTGTACCAAACACACTACCGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2345 AccreceAsAscriccrecesecaseAsArcAcecesecareArereseseracere
                                                                                                                1445 decaherdeakechekechidhidheereakerdeakirdeakedeedeakedarie
                                                                                                                                                                                                                                                                  GGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAAGATGGGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                            GATGGCTCCGATGAGAAAACTGTGAGCTGCGGTCCTTTACCAAACAGGCTCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGGTTGGTGGCACGAATGCGGACGAGGGCGAGTGGCCCTGGCAGGTGAGCCTCCACGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCC
                                                        1385 GGGCAGTICACGIGCCGCACGGGCCGCIGIAICCGGAAGGAGCIGCGCIGIGAIGCCIGG
                                                                                      GCAGACAACAGCGACGAGCAGGGGGGGTGTTCCGGCCCAGACCTTCAGGTGTTCCAAT
                                                                                                                                                                                                                                                                                                                                                                                     CAAAATGGCCTCTGTCTGAGCAAGGGCAACCCTGAGTGTGATGGGGAAGACGGACTGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCACACTGCTACATCGATGACAGGATTCAGGTACTCAGACCCCACGCAGTGGACGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2045 Tretregectrecaecaaceaaceaaceaceacececereaaacaacaaceace
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAACGIAICATCACCCACCCTTCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTACCCATGTCTTCCCTGCTGGCAAGGCCATCTGGGTCACAGGCTGGGGGCACACAAAA
                              GGGATGTTCATGTGCAAGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTCCTGGGTCTGCTGGACCAGAGCGCAGTGCCTCTGGGGGTGCAGGAGCTGAAGCTC
                                                                                                                                                                                                       1605
                                                                                                                                                                                                                                                                1665
                                                                                                                                                                                                                                                                                                                          1725
                                                                                                                                                                                                                                                                                                                                                                                   1785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1905 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2445
                                                                                      1485
                                                                                                                                              1545
                                                                                                                                                                                                                                    1565
                                                                                                                                                                                                                                                                                                                                                                                                                1745
                                                                                                                                                                                                                                                                                                                                                                                                                                              1845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2325
                             1425
                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
g
                                                                                    ð
                                                                                                              g
                                                                                                                                             ₽
                                                                                                                                                                       q
                                                                                                                                                                                                      \stackrel{>}{\circ}
                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \overset{\circ}{\circ}
                             à
                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
```

Sequence 1, Application US/10267219

Publication No. US20030143219A1

Publication No. US20030143219A1

Publication No. US20030143219A1

APPLICANT: Madison, Edwin

APPLICANT: Weh, Jiunn-Chern

TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING A TRANSMEMBRANE SERINE PROTEASE 2:

TITLE OF INVENTION: NUCLEIC ACID MOLECULES AND METHODS BASED THEREON

FILE REPRENCE: 24745-1621

CURRENT APPLICATION NUMBER: 2010-08

PRIOR FILING DATE: 2002-10-08

PRIOR APPLICATION NUMBER: 60/328,530

FRIOR FILING DATE: 09-0CT-2001 2624 2684 2642 ccaergrecace-cerecaecireaacacrecacecreacrecaccaccaccacce-ceaa 2699 щ : 104 GACTTCGGCGCGCGCACTCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAG 164 GACTTCGGCGCGGGACTCAAGTACAACTCCCGGCACGAGAAAGTGAATGGCTTGGAGGAA 124 GGCGTGGAGTTCCTGCCAGTCAACAACGTCAAGAAGGTGGAAAAGCATGGCCCGGGGCC 184 64 AAGCCAGGCGTGTACACACACGCTCCCTGTTTCGGGACTGGATCAAAGAGAACACTGGG GTATAGCAGGATGGACAGCCGACCACAAACACCCCACAGGGATGCCCGACATGCACA 2585 GTATAGGGGCCGGG---GCCACCCAAATGTGTACACCTGCGGGGCCACCCATCGTCCACC GATGGGCGAATGTTCCAGGCTGGTGTGGTGAGCTGGGGGTGAAGGCTGCGCTCAGAGGAAC 2465 GATGGCCGGATCTTCCAGGCCGGTGTGGTGAGCTGGGGAAGACGGCTGCGCTCAGAGGAAC AAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGG 45 GATCGGACCGCCAAAACCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGCTCTCAG GAGCGCCTCGGGGTACCATGGGGAGCGATCGGGCCCCGCAAGGGCGGAGGGGGCCCCGAAG GGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAGAAAGCGAGGCCCCAGGCGC DB 13; Length 3147 5 508; Indels LOCATION: (23)...(2589)
OTHER INFORMATION: Nucleotide sequence encoding MTSP1
PUBLICATION INFORMATION:
AUTHORS: O'Erien, T.J. and Tanimoto, H.
DATABASE ACCESSION NUMBER: Genbank #AR081724
DATABASE ENTRY DATE: 2000-08-31 2745 ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780 2700 ACATÁCACTGTGAACTCAATCTCCAGGGCTCCAAAT 2735 0; Mismatches 60.6%; Score 1883.2; 81.2%; Pred. No. 0; NUMBER OF SEQ ID NOS: 18 SOFTWARE: FastSEQ for Windows Version 4.0 PATENT DOCUMENT NUMBER: 5,972,616
PATENT FILING DATE: 1998-02-20
PUBLICATION DATE: 1999-10-26

1365 TACAGGGACACCGGGTTCCTAGCTGACTACCTACGACTCCAACGACCCGTGCCCA 1424	1545 ACGIGCAAAAACCAGTTCTGCAAGCCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGT 1604	1665 GGGAAGTGTCTCCTCAGAGCCAGAAGTGTAATGGGAAGACACTGTGGAGATGGGTCT 1724 1625 GGGAAGTGCTCTCTGAAAAGCCAGCAGTGCAATGGGAAGGACGACTGTGGGACTGTGGGGTCC 1684 1725 GACGAGGCTTCATGTGACAGCGTGAATGTCGTCTTGCACCAAATAACGGGTGC 1784 1685 GACGAGGCTTCATGTGACAGTGAATGTCGTCTTTGTACCAAATAACGGTGC 1744 1685 GACGAGGCCTCCTGACCAGGTGAAGGGCAACACACACACA	1745 CTCAATGGGCTCTGGAGCAACCCTGAGTGGGGAGGAGGAGGAGGTTAGC		TTCCTGGGTCTGCTGGACCAGAGCGCAGTGCCTCTGGGGGTGCAGGAGCTGAAGCTC [w w w w	ACCTGCGAGAACCTCCTGCAGAACGCCGCGCATGATTCCTC ACCTGCGAGAACCTCATGCCGCAGCAGATCACCCCACGAATGATGTGTGTG
6 6 6 6 6	oy oy	8 B 8 B 8	4 8 4 8	& & & & & & & & & & & & & & & & & & &	8 6 6 6	5 6 6 6 6	60 O
TGGGTGGCAGCCGTGCTGATCGGCCTCCTCTTGCTGGTGGGATCGGCTTC CTGGTGTGGCACTTCCATTATCGGAATGGCGGTTCAAAAAGTCTTCAATGGCCATCTG CTGGTGTGGCACTTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG CTGGTGGCACTTTGCAAACCGGAATGTGCTCCACAGAAGTCTTCAATGGCACATG AGGATCACAAATGAGATCTTTTTTGTGGTATGAGAACTCCACCTCCACAGAGTTTATC AGGATCACAAATGAGAATTTTGTGGATGCCTACGAGACTCCACTCACT	165 AGCCTGGCCAGCAAGGTGAAGGACGCGCTGAAGCTGCTGTACAGCGGAGTCCCATTCCTG 424 465 GGTCCCTACCAAAGAAGTCGGCTGTAAACTGCCTTCAGTGAGGGCAGTGCAGTGATCGCTAC 524 425 GGCCCCTACCAAAGGAGTCGGCTGTGACGGCCTTCAGCGAGGGCAGCGTCATCGCCTAC 484 525 TACTGGTCAGAGTTCAGCATCCCCCACACCTGGCAGAAGAGGTTGATCGCCCATGGCT 584 685 TACTGGTCAGAGTTCAGCATCCCCCACACCTGGCAGAAGAGGTTGATCGCCCATGGCT 584 686 TACTGGTCAGAGTTCAGCATCCCCCACACCTGCACACACA	GTGGAGCGAGTTGTAACATTGCCACCCCGAGCACTGAAATCCTTCGTGCTAACA GAGGAGCGGTAATCATTGCCACCCCGAGGACGCTCCTTGAAGTCCTTTGTGTCTCACACACA	AGCTTTGGCCTGCAGGCGGGTGTGGAGCGCTTCACCAGGCGCTTCCCT AACAGTCCCTACCGGGGTGTGGAGCTGATGGGGTCCTGCGGGGGACGCTTCCCT AACAGTCCCTACCGGCGATGCCGGTGCCAGTGGGTCCTGCGGGGGACGCCTGCGGGGGACGCTCTGACGCCCTACCGGGGGGACGCCGACTGCGGGGGGGG	785 GTGCTGAGCCTCCGCCAGCTTTGACCTTGCGTCCTGCGACGAGCGGCGGCAGCGAC 844 885 CTGGTCACCGTGTATGATAGCCTCAGCCCCATGGAACCCCAGCGCGGCGGCGGCGCGCGTGTT 944 845 CTGGTCACCGTGTACAACACCTGAGCCCCATGGAGCCCCTGGTGCAGCGCTGTGT 904 945 GGCACCTTCACACCTCCTACAACACCTGACTTTCCTCTCCCCCAGAACGTCTTGTC 1004 946 GGCACCTTCTTCTTTCTTTTTTTTTTTTTTTTTTTTTTT		1125 TACTATCCAGGCCACTACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAAC 1184	1245 GGCTCCTGCACCAAGGACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGAGGTCC 1304

2505	Db 2465 GATGGGCGGATCTTCCAGGCCGG Qy 2565 AAGCCAGGCGTGTACACAAGGC	Db 2525 AAGCCAGGCGTGTACACAAGGC	Oy 2625 GTATAGCAGGATGGACAGACAGA 	Qy 2685 CCTGGATACAGGAGGAACAC: Db 2642 CCAGTGTGCACG-CCTGCAGGCT	OY 2745 ACCGAGACTGTGAACTGCATCCT	120 (7)	Publication No. US20030134794 GENERAL INFORMATION. APPLICANT: Madison, Edwin L. APPLICANT: Ong, Edgar O.		; CURRENT FILING DATE: 2003-01-24 ; PRIOR APPLICATION NUMBER: 60/332, C ; PRIOR FILING DATE: 2001-11-20 ; NUMBER OF SEQ ID NOS: 18	co.		CTHER INFORMATION: Nucleotide sec POBLICATION INFORMATION: DATABASE ACCESSION NUMBER: DATABASE ENTRY DATE: 2000-08-31	. 2	Matches 2223; Conservative 0; Qy 45 GATCGGACCGCCAAAACCATGGG	Db 5 dAGCGCCTCGGGGTACCATGG Qy 105 GACTTCGGCGGGGACTCAAGTP	DD 65 GACTTCGGCGGGGACTCAAGTP Qy 165 GGTGTGGAGTTCCTGCCAAA	Db 125 GGGTGGAGTTCCTGCCAGTCAA Oy 225 TGGGTGGTGCTGCTGGTGGTGTGT	185	Db 245 CIGGIGIGGALTICCATIATION 245 CIGGIGIGGGAITTGCAGIACCG
1425 GGGATGTTCATGTGCAAGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGC 1484	GOGCAGTICACCTGCCGCACGGGGCGGTGTATCCGGAAGAGGGGCTGCGCTGTGATGCTTGA	1485 PERMETECT GENERALINATION FOR THE	1545 ACGIGCAAAACCAGIICTGCAAGCCCCTCTICTGGGTCTGTGACAGTGTCAACGACTGT 1604 1505 ACGIGCAAGAACAAGIICTGCAAGCCCCTCTICTGGGTCTGCGACAGTGTGAACGACTGC 1564	1605 GGGGACGGAAGTGACGAGGGCTGCAGCTGTCCTGCTGGGAGTTTCAAGTGTTCCAAT 1664 1565 GGAGACAGAGGGCAGGGGGGGGGGTGCAGTCCGGCCCAGACTTTCAGGTGTTCCAAT 1624	1665 GGGAAGTGTCTCCCTCAGAGCCAGAAGTGTGATGGGACAACTGTGGAGATGGGTCT 1724 	1725 GACGAGGCITCATGIAGACGIGAAIGTCGICTCTTGCACCAAATATACCTACGGCTGC 1784 	1785 CAAAAIGGCCICTGTGTGAGCAACCCTGAGTGTGATGGGAAGACGGACTGTAGC 1844 	1845 GATGGCTCCGATGAGAAAACTGTGACTGTGGGTTCCTTTACCAAACAGGCTCGC 1904 	1905 GIGGITGGIGGAAGAAAAGGGGAAGAGGGGAGGGGCCAGGTGAGCCTCCAGGC 1964 	1965 CIGGGCCAGGGCCACITGTGTGGGGCCTCGCTCATCTCTCTGACTGGTCTCTGGA 2024 1925 CIGGGCCAGGGCCACGTGCGGGGGGGCTTCCCTCAACTGGCTGG	2025 GCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCC 2084	2085 TICCTGGGTCTGCTGGACCAGAGCGAGTGCCTCTGGGGTGCAGAGCTGAGCTC 2144 2045 TICCTGGGCTTGCACGACGAGGCAGCGCAGCGCCCTGGGGTGCAGGCAG	2145 AAACGTATCATCACCCACCCTTCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTG 2204 2105 AAGCGCATCATCTCCCACCCTTCTTCAATGACTTCACCTTCGACTATGACATCGCGCTG 2164	2205 CIGGAGCIGGAGAAGICGGIGGAGTACAGCACCGICGCGCCCCATCIGCCIGCCTGAI 2264 2165 CIGGAGCIGGAGAAACCGGCAGAGIACAGCICCAIGGIGGGCCCAICIGCCGGAC 2224	2265 GCTACCCATGTCTTCCCTGCTGGCATCTGGGTCACAGGCTGGGGGCACACAAA 2324 	2325 GAGGGAGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACAGACC 2384 	2385 ACCIGIGAGGACCICAIGCGGAGCAGAGATCACCCCACGAAIGAIGIGIGGGGITTCCIC 2444 2345 ACCIGIGAGAACTICTICGAGCAGAGAACAIGAACAAACAAACAAAACA	AGTGGGGGTGTGGACTCCTGCAGGGTCTCTGGTGGCCCCTTGTCAAGGGGGGGAAA	2405 AGCGGCGCGCGCGCCTCCTGCCAGGGTGATTCCGGGGGACCCCTGTCCAGCGTGGAGGCG 2464
Š	qq :	ž 8	<u>ئ</u> ۾	දු පු	oy Dp	\$ A	Q. Db	70 da	75 Q	\$ 93	δ λ	oy Dp	ZZ GD	QZ Dp	<i>ኢ</i> 원	Q7 Dp	k d	ζ	අ .

MOLECULES ENCODING SERINE PROTEASE CVSP17, THE ENCODE S AND METHODS BASED THEREON GGTGTGGTGGGCTGGGGAACGGCTGCGCTCAGAGGAAC 2524 2624 GCCGACCACACACCCCACAGGGATGCCCGGACATGCACA 2684 CCCAAATGTGTACACCTGCGGGGCCACCCATCGTCCACC 2641 CTGACGACATTTATGCTGTGGCCTCCCCCCCCCAACACA 2744 CTGGAGACTGGACTGCAGCACCAGCGCCC-CCAGA 2699 STGTGGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAAC 2564 GGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGGCTCTCAG 104 TACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAG 164 CGGAATGTGCGGGTTCAAAAGTCTTCAATGGCCATCTG 344 224 CTGATCGGCCTCCTCTTGTTGTGGGGGATCGGCTTC 244 TIGITICAGCITICCICITICCICCICCATGGCTGGCTTG 284 39GAGCGATCGGCCCCCAAGGGCGGAGGGGGCCCGAAG 64 CTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGG AACAATGCCAAGAAGTGGAGAAGCGAGGCCCCCAGGCGC 5; Gaps oore 1883.2; DB 13; Length 3147; red. No. 0; Mismatches 508; Indels 5; (equence encoding MTSP1 CTTAGGACTCAGAGT 2780 rccadddcrccaaar 2735 ank #AR081724 0/302,840A rsion 4.0 ,015 40A S

8 6 6 6 6 6 6 6 6 6 6 6 6

1425 GGGATGTTCATGTGCAAGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGG 1484 	1485 GCAGACTGCCCGGATTATAGTGATGATGCTACTGCCGATGCAATGCCACCACCAGTTC 1544	1545 ACGTGCAAAAACCAGTTCTGCAAGCCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGT 1604 	1605 GGGGACGGAAGTGACGAGGGCTGCAGCTGCTGCTGGGGAGTTTCAAGTGTTCCAAT 1664	1665 GGGAAGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGATGGGTCT 1724	1725 GACGAGGCTTCATGTGACAGCGTGAATGTCGTCTTTGCACCAAATATACCTACC	1785 CAAAATGGCCTCTGTCTGAGCAAGCGCAACCCTGAGTGTGATGGGAAGGCGACTGTAGC 1844	1845 GAIGGCICCGAIGAGAAAACIGIGACIGIGGGCIGCGAICCTITACCAACAGCICGC 1904 	1905 GIGGTIGGICGCACGAAIGCCGACGAGGGAGTGGCCTGGCAGGGAGCCTCCACGCC 1964 	1965 CTGGGCCAGCTTGTGTGGGGCCTCGTCATCTCTCCTGACTGGCTGG	2025 GCTCATTGCTTTCAGGATGACAAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCC 2084	2085 ITCCIGGGTCIGCIGGACCAGAGCAAGCGCAGTGCCTCTGGGGIGCAGAGCTGAAGCTC 2144	2145 AAACGTATCATCACCCCCTTCCTTCAATGATTTCACCTTCGACTATGACATCGCCTTG 2204	2205 CTGGAGCTGGAGAAGTCGGTGGAGCACCGTCGTGGGCCCCATCTGCCTGGT 2264	2265 GCTACCCATGTTCCTGCTGCTGCAGCCATCTGGGTCACAGGCGGGGGGCACACAAAA 2324	2325 GAGGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGATCCGTGTCATCAACCAGACC 2384 2285 TATGGAGGCACTGGGCGCTGATCCTGCAAAAGGGTGAGATCCGGCGTCATCATCAACCAGAGC 2344	2385 ACCTGTGAGGACCTCATGCCGCAGCAGAACACCCCACGAATGATGTGTGGGGTTTCCTC 2444	2445 AGTQGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGAGAAA 2504	2505 GATGGGCGAATGTTCCAGGCTGGTGTGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAAC 2564
y du	λ G	୍ଦ ଶ	ර් පි	දු පු	Sy Bp Sy	o da	Oy Dp	Qy DP	g S	යි ර	δλ Op	& 8	දු පු	රු සි	<i>ଧ</i> ଶ୍ର	ζζ Q	ò a	ò
GAGTITAIC 404		CCTAC	TGGCT 		0-1-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0	TCCCC	ACTCT 	STGAC 		rrgrc - CArc	0 T D D T D	20000	CAAC	CAGTG	361CC 	ACTCG	CCCA 14	
AGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGT 	AGCTIGGCCAGGTGAAGGGGCGTGAAGCTGCTGTAACAATGAAGTCCCTGTCTGT	GGTCCCTACCACAAGAACTCGGCTGTAACTGCCTTCAGTGGGCAGTGTCATCG	TACTGGTCAGAGTTCAGCATCCCCCACACGGGCAGAAGAGGTTGATCGCGCCA	GTGGAGCGAGTTGTAACATTGCCACCCGAGCACGGGCACTGAAATCCTTCGTGCTAACA 	TCTGTGGTGGCCTTCCCCGTTGACCCCAGAATGCTGCAGAGGACTCAGGACAACA 	AGTITIGCCCTGCATGCCCATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCT	AACAGTCCCTA.CCGGGGCATGCCCGCTGCCAGTGGGTCCTGCGGGGGACGCCG	GIGCTGAGCTCACCTTCCGAAGCTTTGATGTCGCTCCTGTGATGAGCATGGCACATGTCGCACTTTGCTGCATGATGTTTTGCTCCTCCTGTGATGATGATGTTTTGCTCCTGTGATGATGATGTTTTGCTTTTTTTT	CTGGTCACCGTGTATAGATAGCCTGAGCCCCATGGAACCCCACGCTGTGGTGCGGCTGTGT 	GGCACCTTCTCACCCTCCTACAACCTGACTTTCCTCTCCCAGAACGTCTTCCTTC	ACGCTGATAACCAATACTSACCGGCGACATCCTGGCTTTGAGGCCACTTTCTTCCT 	CCCAAGATGACCAGCTGTGGCGCTTTTTGAGTGACCCCAAGGGACATTTAGCA(TACTATCCAGGCCACTACCGCCCAACATCAACTGCACATGGAATATCAAGGTGC 	AACCGGAACGTGAAGGTGCGCTTCAACTCTTCTATCTGGTGGACCCCAACGTACC 	GGCTCCTGCACCAAGGACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGAGCTCC 	CAGTITIGIGGIGAGCAACAACAACAAATTACAGTICCACTICCATICIGATICACICG	TACAGGACACGGGTTCCTAGCTGAGTACCTCTCCTACGACTCCAAGGACCGGTG	
345 AGGATCACA 305 AGGATCACA			525 TACTGGTCA(585 GTGGAGCGA(645 TCTGTGGTG 605 TCAGTGGTG	705 AGTTTTGCCC	765 AACAGTCCC; 725 GACAGCCCC		885 CTGGTCACCC	945 GGCACCTTCT 905 GGCACCTACC	1005 ACGCTGATA! 		1125 TACTATCCAC 1085 TACTACCCAC	1185 AACCGGAACC 		1305 CAGTTTGTGC		

405 AGCCTGGCCAGCCAGCTGAAGGAGGCGCTGAAGCTGTTGCAATGAAGTCCCTGTCCTG 464	TCTGTGGTGGCTTCCCCATGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGC TCTGTGGTGGTTGCCTTCCCCATGACCCCAGAATGCTGCAGAGGACCCAGGACAACAGCTGC TCTGTGGTGGTTTCCCCTGGACTCCCAGAATGCTGCAGAGACCCCGGGACAACAGCTGC TCTGTGCTTGCCTGAGAGACTCCAGAGAGACAACAGCTTCCCCTGGACAACAGCTGCCTGGTTTTTGCCTTGCCTGAGAGACAGGAGACAACAGCTTCCCTGGTTTTGCCTGAGAGACAGGCTGCAGAGACAACAGCTTCCCTTGAGAGACTGCCTTTGGCTTGAGAGAGA		945 GGCACCTTCTCACCCTCCTACAACCTGACTTTCCTCCTCCCCAGAACGTCTTCCTTGTC 1004	CCCAAGATGAGCAGCTGTGGCGGCTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCCCCCC	1185 AACCGGAACGTGAAGGTGCCCTTCAACTCTTCTATCTGGTGGACCCCAACGTACCAGG 1244	13.05 CASTITGRGGGGGAGCAGCAGGAGGTTACCGTTCCATTCTGATCACTCG 13.64
8 8 8 8 8 8	3 8 8 8 8 8	66868	o da o	o o o	\$ 90 \$ 90	8 4 5 8 5 8
		APPLICANT: Ong, Edgar O. TILLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING SERINE PROTEASE CVSP17, THE ENCODING TILLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING SERINE PROTEASE CVSP17, THE ENCODING THE OF INVENTION: NUMBER: US/10/302,840A CURRENT FILING DATE: 2003-01-24 PRIOR APPLICATION NUMBER: 66/332,015 PRIOR PLING DATE: 2001-11-20 NUMBER OF SEQ ID NOS: 18 SOFTWARE FASTSED for Windows Version 4.0	, to	Query Match 60.6%; Score 1883.2; DB 13; Length 3147; Best Local Similarity 81.2%; Pred. No. 0; No. 0; Pred. No. 0; Pred. No. 0; Matches 2223; Conservative 0; Mismatches 508; Indels 5; Gaps 3; QY 45 GATCGGACCGCCAAAACCATGGGTAGCAATCGGGCCGCAAGGCCGGAGGGGCTCTCAG 104 Db 5 GAGCGGCTCGGGGAACCATGGGGAGCGATCGGGCCGGAAGGGGGGCCCGAAG 64	Qy 105 GACTTCGGCGCGGGACTCAAGTACAACTCCCGGCTAGAACATGAACTGGAATGGGTTGAGGGG 164 Db 65 GACTTCGGCGCGGGGACTCCAGGAACTCCCGGCACGAGAAAGTGAATGGCTTGGAGGAA 124 QY 165 GGTGTGGAGTTCCTGCCTGCGAACATGCCAAGAAGTGGAAGCGAGGCCCCAGGCG 224 Db 125 GGCGTGGAGTTCCTGCCAGTCAACAACGTCCAAGAAGGTGGAAAGCCCCGGGGCCC 184	QY 225 TGGGTGGTGGCTGGTGGTGTTCAGCTTCCTCTTGCTCCTCATGGCTGGC

		PRESEUTE 14 1. Sequence 1, Application US/1011221A 1. Sequence 1, Application US/1011221A 1. Sequence 1, Application US/1011221A 1. Sequence 1, Application No. US20030166651A1 1. SEQUENCAL INFORMATION: MUCLECC ACID MOLECULES BROODING A TRANSMEMBRANE SERINE FOR TITLE OF INVARION: WINCLESC ACID MOLECULES BROODING A TRANSMEMBRANE SERINE FOR TITLE OF INVARION: WINCLESC ACID MOLECULES AND METHODS BASED THEREON 1. TITLE OF INVARION: WINCLESC ACID MOLECULES AND METHODS BASED THEREON 1. TITLE OF RINCHARD ANTE: 2010-103-103-101 1. PRICE FILING DATE: 2010-103-103-101 1. MURRIESC OF SEQ ID NOS: 22 1. SEQ ID NOS: 23 1. SEQ ID NOS: 23 1. SEQ ID NOS: 24 1. SEQ ID NOS: 24 1. SEQ ID NOS: 25 1. SEQ ID NOS: 25 1. SEQ ID NOS: 26 1. SEQ ID NOS: 27	
1485 GCRAACTGCCCGATTATAGTGATGACCTTACTCCAGTGG 1445 GCCGACTGCCCCGATTATAGTGATGACTCACTCCCAGTGGGTGG	1485 GCAGACTGCCCGGATTATAGTGATGAGCGTTACTGCCGATGCAATGCCACCCAC	1725 GACGAGGCTTCATGTGAACGTGAATGTCGTTCTTGCACCAAATATACCTACC	

ENCODING A TRANSMEMBRANE SERINE PROTEASE 9, AND METHODS BASED THEREON TTATGCTGTGGCCTCCCCCCCCAACACA 2744 AACACCCACAGGGATGCCCCGACATGCACA 2684 TACACCIGCGGGCCACCCAICGICCACC 2641 saccectreacrecacecece - ceasa 2699 3GGCCGCAGGCCGGAGGGGCTCTCAG 104 GGCTAGAGAACATGAATGGCTTTGAGGAG 164 AGAAAGTGGAGAAGCGAGGCCCCCAGGCGC 224 rccrerrgercrecercardgerragerra 284 GGCCCGCAAGGCGGAGGGGCCCGAAG 64 5; Gaps 2; DB 13; Length 3147; es 508; Indels coding MTSP1 AGAGT 2780 CAAAT 2735 724

OY 345 AGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACCTCCACAGAGTTTATC 404	QY 405 AGCCTGGCCAGGTGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTG 464	Oy 465 GGTCCTACCACAAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTAC 524	Qy 525 TACTGGTCAGAGTTCAGCATCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCATGGCT 584	2y 585 GTGGAGTGGTAACATTGCCACCCCGAGCACGGGCACTGAAATCCTTGGTGCTAACA 644	OY 645 TCTGTGGTGGCCTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGC 704	OY 705 AGTITIGCCCTGCATGCCCATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCTTCCCC 764	QY 765 AACAGTCCCTACCGGGGCATGCCCGCTGCCAGTGGGTCCTGCGGGGGAACGCCGACTCT 824	QY 825 GTGCTGAGCCTCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGGAC 884	QY 885 CTGGTCACCGTGTATGATAGCCTGAGCCCCATGGAACCCCACGCTGTGGGGGCTGTGT 944 Db 845 CTGGTGACGGTGTACAACACCCTGAGCCCCATGGAGCCCCACGCCCTAGTGCAGTTGTGT 904	QY 945 GGCACCTTCTCACCCTCCTACAACCTGACTTTCCTCCTCCCAGAACGTCTTCCTTGTC 1004	QY 1005 ACGCTGATAACCAATACTGACGGGGACATCCTGGCTTTGAGGCCACTTTCTTCCAGCTG 1064	OY 1065 CCCAAGATGAGGCAGCTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCC 1124	QY 1125 TACTATCCAGGCCACTACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAAC 1184	QY 1185 AACCGGAACGTGAAGGTGCGCTTCAAACTTCTTCTATCTGGTGGACCCCAACGTACCAGTG 1244	Qy 1245 GGCTCCTGCACCAAGGACTATGTGGAGATCAACGGGGAAAGTACTGCGGTGAGAGTTCC 1304	Oy 1305 CAGTITGIGGIGAGCAGCAACAAGAITACAGICCACTICCAITCTGAICACTGG 1364	OY 1365 TACACGGACACCGGGTTCCTAGCTGAGTACCTCTCCTACGACTCCAACGACCGTGCCCA 1424
2505 GATGGGCGAATGTTCCAGGCTGGTGACGTGAGCTGAAGGCTGCGCTCAGAGGAAC 2564	2565 AAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGACACACAGGG 2624 2525 AAGCCAGGGGTGTACACAAGGCTCCCTCTGTTTCGGGACTGGATCAAAGAGAACACTGGG 2584	2625 GTATAGCAGCATGGACGACCACAAACACCCACAGGGATGCCGGACATGCACA 2684	2685 CCTGGATACAGGAAGGAACACTTTATGCTGTGGCCTCCCCCCCAACAC 2744 2642 CCAGTGTGCACG-CCTGCAGAGCTGGAACGCTGACTGCACCAGGGCC-CCAGA 2699	2745 ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780 2700 ACATACACTGTGAACTCCAAGGCTCCAAAT 2735	SULT 15 -10-112-221A-3 Seminas 2 Anniinating 186/1911933	Publication No. US20030166851A1 GENERAL INFORMATION: APPLICANT: Madison, Edwin	TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING A TRANSMEMBRANE SERINE PROTEASE 9 TITLE OF INVENTION: ENCODED POLYPEPTIDES AND METHODS BASED THEREON FILE REPERENCE: 27445-1615	CURRENT FILING DATE: 2002-03-27 PRIOR APPLICATION NUMBER: 60/279,228 PRIOR FILING DATE: 2001-03-27 PRIOR FILING DATE: 2001-03-27	PRIOR FILING DATE: 2001-05-15 NUMBER OF SEQ ID NOS: 22 SOFWARE: FastSEQ for Windows Version 4.0		NAME/KEY: CDS LOCATION: (1865)(2590) OTHER INDORMATION: Nucleic acid sequence of protease domain of MTSP1	Query Match Query Match Query Score 1883.2; DB 13; Length 3147; Pred. No. 0; Matches 2223: Conservative 0. Wismarches 508. Tandels 5. Gane 3.	ACCATGGGTAGCAATGGGGGCGCAAGGCGGAGGGGGGCTCTCAG 10	GACTICGGCGGGGACTCAAGIACAACTCCGGCTAGAGAACAIGACTTIGAGGAG	GGGGGGGGTTCCTGCCTGCGACACATGCCAAGAAGTGGAGAAGGGGGGCCCCAGGGCCC	TGGGTGGTGGTGGCAGTGCTGTTCAGCTTCCTCTTGCTCTCCCTCATGGCTGGC	CTGGTGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTG

ò

90 % 90

상 원

정

8 8 8 8

		-	-	X+
1605 GGGACGGAAGTGACGAGCTGCTGCTGCTGCTGAGTTTCAAGTGTTCCAAT 1664	1785 CAAATGGCTCTGTCTGAGGAAGGCAACCCTGAGTGTGAGGAAGACGGACTGTAGC		S AAGGGCATCATCTCCCACCCTTCTTCATTCATTCATTCAT	2285 TATGGAGGACTGGCGCTGATCCTGCAAAGGGTGAGATCCGCGTCATCAACCAGACC 2344 2385 ACCTGTGAGGACTCATGCCGCAGCAGATCACCCCACGAATGATGTGTGGGGTTTCCTC 2444 2345 ACCTGGGAGACCTCTGCCGCAGCAGATCACCCGCGCATGATGTGGTGGGGTTTCCTC 2404 2345 ACCTGGGAGATCTCCTGCCAGGAGATCACGCGCGCATGATGTGGGGTGCTCCTC 2404 2445 AGTGGGGGGTGACTCCTCCAGGAGAGATCACGCGCCCTTGTCAAGCGCGGGAGAAA 2504 2405 AGTGGGGGGTGATCTCCAGCAGGTGATTCCGGGGGGGGGG

상 월

6 % G

à,

2465 GAIGGGCGGATCTTCCAGGCCGGTGTGGTGAGCTGGGGAGACGGCTGCGCTCAGAGAAC 2524	2565 AAGCCAGGCGTGTACACAAGGCTCCCTGTAGTTCGGGACTGGATCAAGAGCACACTGGG 2624	2525 AGCCAGGCGTGTACACACAGGCTCCCTCTGTTTCGGGACTGGATCAAAGAGAACACTGGG 2584	2625 GTATAGCAGCATGGACCAGCCGACCACAAACACCCACAGGGATGCCCGACATGCACA 2684	2585 GTATAGGGGCCGGGGCCACCCAAATGTGTACACCTGCGGGGCCACCCATCGTCCACC 2641	2685 CCTGGATACAGAGGAACACTGACGACATTTATGCTGTGGCCTCCCCCCCC	2642 CCAGTGTGCACG-CCTGCAGGCTGGAGACTGGACCGCTGACTGCACCGCGCCC-CCAGA 2699	2745 ACCCAGACTGTGAACTGCATCCTTAGGACTCAGAGT 2780	2700 ACATACACTGTGAACTCAATCTCCAGGCTCCAAAT 2735	-
2465	2565	2525	2625	2585	2685	2642	2745	2700	
qq	ò	qa	χ̈́	qa	ογ	qa	δ	qq	

Search completed: February 21, 2004, 10:23:01 Job time : 1070 secs 603314210 AGENCOURT 602823173 AGENCOURT 603289385 BY756896

BI688367 BI690615 BQ951529 BG919617

BQ951529 BG919617 CB208872 BI664081 BY756896

602814325 602848502

603284774

603345094 AGENCOURT

BIG46380 BIG5045 BIG50480 BIG5013 BIG6513 BIG5514 BIG55174 BIG5536 BIG406 BIG4245 BIG40669 BIG4245 BIG5337 BIG5337 BIG5337 BIG5337 BIG5337 BIG5337 BIG5337

602967029 602986510 603379936

CA976536 BI248406 BI414245 BF540669

BI695744 BI453178

BI853355 BI078327 BU152438 BF119461 BG861619

BUS17436 BI112917 BF578780

BI697395 BY756283 BI657843 BI454477 BF584458

602052757 602872681 AGENCOURT

603276244

602989878

BI416218 BF301347

BY756896 BI416218 BF301347

BG915045

BI694441 BI656113

BI646380

CB208872 BI664081

602094810 603348134 BY756283

BISTAGE BISTAGE BESTAGE BESTAGE BIG97395 BY756283

BI657843 (BI454477 (BF584458 (

601758388 602795392 602898206

BF119461 BG861619

AGENCOURT

uz54g02.y C0838D07-

BI416184 6 BF118535 6 BF320582 4 CA551053 C

BF118535 BF320582

BI416184

CASS1053 BU179919 BG870626 BI149332

BG968045

AGENCOURT

BG870626 602791606 BI149332 602848871 BG968045 602832425

ALIGNMENTS

Run

```
WIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The T.M.A.G. Consortium (LLNL)
DNA Sequencing by: Sequencing Group at the Stanford Human Genome
Center, Stanford University School of Medicine, Stanford, CA 94305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BCU08514 . 3248 bp mRNA linear HTC 20-SEP-2002
Mus musculus, suppression of tumorigenicity 14 (colon carcinoma),
clone IMAGE:3489914, mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 3248)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Strausberg R.

Direct Submission
Submitted (25-MAY-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BC008514.1 GI:14250187
     2200.0
2200.0
2200.0
2200.0
2200.0
24.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
200.0
20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BC008514
8833.6
7488.8
7788.2
750.4
750.4
747.2
739.2
739.2
739.2
739.2
739.2
                                                                                                                                                                                                                                                                             720.8
716
710.8
                                                                                                                                                                                                                                                                                                                                710.8
700.4
700.2
6692.6
6892.6
6887.2
6781.2
6781.2
678.2
678.3
665.4
665.4
665.4
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
665.3
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1
BC008514
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REMARK
COMMENT
  BC008514 Mus muscu
AK052738 Mus muscu
AK085410 Mus muscu
BQ88551 AGENCOURT
                                                                                                                                                          February 21, 2004, 02:06:37; Search time 6211 Seconds (without alignments) 12154.195 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                        Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           45562784
          GenCore version 5.1.6 (c) 1993 - 2004 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   22781392 seqs, 12152238056 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Match 0%
Match 100%
first 45 summaries
                                                                                                                     sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BC008514
AK052738
AK085410
BQ885551
                                                                                                                                                                                                                                                                                                                                                                   IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           H
                                                                                                             - nucleic search, using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gb_est1:*
gb_est2:*
gb_est3:*
gb_est4:*
gb_est4:*
gb_est5:*
em_est5:*
em_est5:*
em_gss_hun:*
em_gss_pln:*
em_gss_pln:*
em_gss_rvt:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          em_gss_phg:*
em_gss_vrl:*
gb_gssl:*
gb_gss2:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    em_esthum: *
em_estin: *
em_estw: *
em_estpl: *
em_estpl: *
em_estro: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11111
                                                                                                                                                                                                                                                                   US-09-900-751-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 em estba:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query
Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3248
4017
2689
944
                                        Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Post-processing: Minimum | Maximum | Listing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EST: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99.9
99.4
30.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
1111.
111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sed
                                                                                                                                                                                                                                                                                           Perfect score:
                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3102.8
3087.6
956.4
843.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB
Maximum DB
                                                                                                                OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
                                                                                                                                                                                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Database
                                                                                                                                                                  on:
                                                                                                                                                                                                                                                                   Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   No.
```

N

```
831
                                                                                         891
                                                                                                                                                        1011
                                                                                                                                                                                        101
                                                                                                                                                                                                        1021
                                                                                                                                                                                                                       1131
                                                                                                                                                                                                                                                                      1141
                                                                                                                                                                                                                                                                                      1251
                                                                                                                                                                                                                                                                                                      1201
            199
                           771
                                           721
                                                                          781
                                                                                                         841
                                                                                                                         951
                                                                                                                                         901
                                                                                                                                                                        196
                                                                                                                                                                                                                                      1081
                                                                                                                                                                                                                                                                                                                                                                                                   1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1681
                      g
                                         ò
                                                     셤
                                                                    ð
                                                                                        셤
                                                                                                        à
                                                                                                                     g
                                                                                                                                       ð
                                                                                                                                                      g
                                                                                                                                                                                    qq
                                                                                                                                                                      à
                                                                                                                                                                                                      ò
                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                     \delta
                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                     \delta
                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                    임
                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                 염
                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                 업
                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                months
                                                                                                                                                                                                                              ö
                                    170
                                                                                                                                                                                                                                                                         CCATGGGTAGCAATCGGGGGCCGCAAGGCCGGAGGGGGGCTCTCAGGACTTCGGCGGGGAC 120
                                                                                                                                                                                                                                                                                            230
                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                            290
                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                           350
                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                           410
                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                         470
                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                          530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATTGCCACCCCGAGCACAGGGCACTGAAATCCTTCGTGCTAACATCTGTGGTGGCCTTCC 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATTGCCACCCCGAGGACGGCACTGAATCCTTCGTGCTAACATCTGTGGGGCCTTCC 770
                                                                                                                                                                                                                                              9
Web site: http://www-shgc.stanford.edu contact: (Dickson, Mark) mcd@paxil.stanford.edu Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and Myers, R. M.
                                                                                                                                                                                                                                                        CATGGTAGACGGCTGCCCGGAGGGACCACGCGTCTGAGACCGGCGATCGGACCGCCAAAA
                                                                                                                                                                                                                                                                                                                     CTGCGAACAATGCCAAGAAAGTGGAGAAAGCGAGGCCCCCAGGCGCTGGGTGCTGGTGG
                                                                                                                                                                                                                                                                                                                                                   TGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTGGGTCCCTACCACAAGA
                                                                                                                                                                                                                                         CATGGTAGACGGCTGCCCGGAGGGACCACGCGTCTGAGACCGGCGATCGGACCGCCAAAA
                                                                                                                                                                                                                                                                                   TCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAGGGTGTGGAGTTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTATCGGAATGTGCGGGTTCAAAAGTCTTCAATGGCCATCTGAGGATCACAAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                        ATTATCGGAATGTGCGGGTTCAAAAGTCTTCAATGGCCATCTGAGGATCACAAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCATCCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCATGGCTGTGGAGCGAGTTGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTGTCATCGCCTACTACTGGTCAGAGTTCA
                                                                                                                                                                                                                              Gaps
                                                                                                                           /db_xref="taxon:10090"
/clone="IMAGE:3489914"
/tissue_type="Mammary tumor. WAP-TGF alpha model.
                                                                                                                                                                                                             DB 11; Length 3248;
                                                                                                                                                                                                                              ô
                                                                                                                                                                                                                           2; Indels
                                                                                                                                                                                                          99.9%; Score 3102.8;
99.9%; Pred. No. 0;
live 0; Mismatches
                                                                                                                                                                             /note="Vector: pCMV-SPORT6"
918 c 928 q 668 t
                                                                                                                                                  old, gross tissue."
/clone_lib="NCI_CGAP_Mam5"
/lab_host="DH10B"
                                                                                                                                                                                      מ
                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                    ๙
                                                                                                                                                                                   734
                                                                                                                                                                                                         Query Match
Best Local Simi:
Matches 3104;
                                                                                                                                                                                                                                          Н
                                                                                                                                                                                                                                                          111
                                                                                                                                                                                                                                                                                                                                                                                       351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     591
                                                                                                                                                                                                                                                                         19
                                                                                                                                                                                                                                                                                         171
                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                         231
                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                        291
                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                      411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    711
                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                      471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                  BASE COUNT
ORIGIN
                                                                                    FEATURES
                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                   ద
                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                       Д
                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  рр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

Q

 δ g δ $\dot{\delta}$

à

à

1010 1070 1020 1130 1080 1190 1140 1250 1200 1370 1310 1260 1320 1430 1380 1490 1550 1500 1610 1560 1670 1620 1730 1680 1790 1740 1850 720 830 780 890 840 950 900 960 TCCTAGCTGAGTACCTCCTACGACTCCAACGACCCGTGCCCAGGGATGTTCATGTGCA 1440 CCATGGTGCAGCAGTGACGCTTCACTACCCCTGGCTTCCCCAACAGTCCCTACCCGG CCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGCAGTTTTTGCCCTGCATG CATTGACCCCAGAATGCTGCAGAGACTCAGGACAACAACAGCTGCAGTTTTGCCCTGCATG TCCCCAACAGTCCCTACCCGG CGCATGCCCGCTGCCAGTGGGTCCTGCGGGGGACGCCGACTCTGTGCTGAGCCTCACCT TCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGTGACCTGGTCACCGTGTATG rccgaagcrrrgargrcgcrccrrgrgargagcarggcagrgaccrggrcaccgrgrarg CTGACCGGCGACATCCTGGCTTTGAGGCCACTTTCTTCCAGCTGCCCAAGATGAGCCA TGCGCTTCAAACTCTTCTATCTGGTGGACCCCCAACGTACCAGTGGGCTCCTGCACCAAGG 1371 ACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGAGGTCCCAGTTTGTGGTGAGCA APAGCCTGAGCCCCATGGAACCCCACGCTGTGGTGCGGCTGTGTGGCACCTTCTCACCCT CCTACAACCTGACTTTCCTCTCCTCCCAGAACGTCTTCCTTGTCACGCTGATAACCAATA CIGACCGGCGACATCCTGGCTTTGAGGCCACTTTCTTCCAGCTGCCCAAGATGAGCAGCT GTGGCGGCTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCCTACTATCCAGGCCACT 1191 GTGGCGGCTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCCTACTATCCAGGCCACT Accedecenacarcascargenararchaegrecechaenacerganegrange 1311 TGCGCTTCAAACTCTTCTATCTGGTGGACCCCAACGTACCAGTGGGCTCCTGCACCAAGG 1261 ACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGGGTCCCCAGTTTGTGGTGAGCA 1431 GCAACAGCAAGATTACAGTCCACTTCCATTCTGATCACTCGTACACGGACACGGGGT 1321 GCAACAGCAGCAAGATTACAGTCCACTTCCATTCTGATCACTCGTACACGGACACCGGGT 1491 TCCTAGCTGAGTACCTCTCCTACGACTCCAACGACCCGTGCCCAGGGATGTTCATGTGCA 1441 AGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGGGCAGGCTGCCCGGATT 1551 AGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGGGCAGACTGCCCGGATT 1501 ATAGTGATGAGCGTTACTGCCGATGCCATCCACCAGCTTCACGTGCAAAAACCAGT 1611 ATAGTGATGAGCGTTACTGCCGATGCGATGCCACCCACCAGTTCACGTGCAAAAACCAGT TCTGCAAGCCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGTGGGGACGGAAGTGACG AGGAGGCTGCAGCTGCTGCTGGGAGTTTCCAAGTGTTCCAATGGGAAGTGTCTCCCTC AGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGATGGGTCTGACGAGGCTTCATGTG CCCATGGTGCAGCAGACACGCTTCACTACCCCTGGC

us-09-900-751-1.rst

2931 TTGCGTGCTAGCGCCCAGCCTGGGGCAAGGGTTTGATGCCAGCCTCCCCCTCTAGCC 2990 2881 CTGAGCTGCGTGAAGATGTGCTGCTCCCGAAGGGTTTGATGCTCTCCCCTCTAGCC 2940 2991 CTGAGCTGGGTGAAGATGATGCTGTCCCGAAGAGGTTTTCCAACTGTCATTGAGCTCCC 2940 2991 CTGAGCTGGGTGAAGATGATGTTTTCCAACTGTTCATTGAGGTCCC 3050 2941 GGGAGCCCTATGGGAAGAGGGCTCAGGGTTTTTCCAGGAAGCGCCAGCCCTAGGA 3000 3051 GGGAGCCCTATGGAGGGGGCTCAGGGTCACTTTTCCAGGAAGCGCCAGCCCTAGGA 3110 3001 ACCCCAGAAAAGAGTGGTACCTAAGGCTCAAATTGTTTTTGCTGTTGCCAGGGGTGGGT	AK052738 AK052738 AK052738 AK052738 TION Mus musculus 0 day neonate kidney cDNA, RIKEN full-length enriched library, clone:D630041B06 product:suppression of tumorigenicity 14 (colon carcinoma), full insert sequence. AK052738 AK0677138 AK077138		Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegan Fujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohayoneda, Y., Ishikawa, T., Osawa, K., Tanaka, T., Wokazaki, Y., Mutamatsu, M., Inoue, Y., Kira, A. and RIKBN integrated sequence analysis (RISA) syste sequencing pipeline with 384 multicapillary seq Genome Res. 10 (11), 1757-1771 (2000) 11076861	Nawai, J., Shinagawa, A., Shibata, K., Yoshino, M., Itoh, M., Ishii, Y., Arakawa, T., Hara, A., Fukunishi, Y., Konno, H., Adachi, J., Fukuda, S., Aizawa, K., Izawa, M., Nishi, K., Kiyosawa, H., Kondo, S., Yamanaka, I., Saito, T., Okazaki, Y., Gojobori, T., Bono, H., Kasukawa, T., Saito, R., Kadota, K., Matsuda, H., Ashburner, M., Batalov, S., Casavant, T., Fleischmann, W., Gassterland, T., Gissi, C., Kingy, B., Kochiwa, H., Kuchl, P., Lewis, S., Matsuo, Y., Nikaido, I., Pesole, G., Quackenbush, J., Schriml, L.M., Staubli, F., Suzuki, R., Tomita, M., Wagner, L., Washio, T., Sakai, K., Okido, T., Furuno, M., Aono, H., Baldarelli, R., Barsh, G., Blake, J., Boffelli, D., Bojunga, N., Carninci, P., de Bonaldo, M.F., Brownstein, M.J., Bult, C., Flitcher, C., Fujita, M., Gariboldi, M., Gustincich, S., Hill, D.,
6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	RESULT 2 AKO52738 LOCUS DEFINITION ACCESSION VERSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS TITLE JOURNAL MEDLINE PUBMED	REFERENCE AUTHORS TITLE JOURNAL MEDLINE PUBMED REFERENCE AUTHORS	TITLE JOURNAL MEDLINE PUBMED REFERENCE	AUTHORS
<u> </u>			, -	
1741 ACAGCGTGAATGTCGTCTTTGCACCAAATAACCTACCGGTGCCCAAATGGCCTCTGTC	2041 ATGACAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCCTTCCTGGGTCTGCTGG 2100 2151 ATGACAAAAATTTCAAGTACTCAGACTACACGATGTGGACGGCCTTCCTGGGTCTGCTGG 2210 2101 ACCAGAGCAAGCGAGTGCCTCTGGGGTGCAGGGCTTCCTGGGTTGCTGC 2210 2211 ACCAGAGCAAGCGAGTGCCTCTGGGGTGCAGGAGCTCAAACGTATCATCACCC 2160 2211 ACCAGAGCAAGCGAGTGCCTTCGAGTAGAGCTGAAGCTACATCATCACCC 2270 2211 ACCAGAGCAAGCGAGTGCCTTCGAGTAGAACGTACATCATCACCC 2270 2271 ACCTTCCTTCAATGATTTCACCTTCGACTAGAACGTTGCTGGAGAAGT 2330 2271 ACCTTCCTTCAATGATTTCACCTTCGACTAGAACATCGCTGAAGATTCACTTCCCTTCGACTAGAACTTCCCTTCGATGAAGTT 2330 2221 CGGTGGAGTACAGCACCGTGGGCCCCATCTGCTGCCTGATGCTACCCATGTTTCC 2280 2231 CGGTGGAGTACAGCACCGTGGGCCCCATCTGCTGCTGATGCTACCCATGTTTCC 2390 2281 CTGCTGGCAAGGCCATCTGGGTTGCCTGCTGATGCTACCCATGTTTCC 2390 2281 CTGCTGGCAAGGCCATCTGGGTTGCCTGCCTGATGATGCTACCCGAGG 2340 2391 CTGCTGGCAAGGCCATCTGGGTTGCTGGCGGCACAAAAGAGGGAGG	2341 CGCTGATCCTGCAGAGGGTGAGATCCGTGTCATCAACCAGACCACCTGTGAGGACCTCA 2400 2451 [SAACA SAACA FGGGG FGGGG	2751 AGACTGACCAAACACCCAGGGACCCCGACATGCACTCTTTTTTTT

```
TCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGTGACCTGGTCACCGTGTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCTTCCCCAACAGTCCCTACCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGCATGCCCGCTGCCAGTGGGTCCTGCGGGGGACGCCGACTCTGTGCTGAGCCTCACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   decareccerreccasresercerecesesesesesesesercerereresecreaecere
                                                                                                                                                                                                                                        Score 3087.6;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                             894 t
                                                                                                                                                                          1164 g
                                                                                                                                                                                                                                        99.4%;
ilarity 99.9%;
Conservative
                                                                                                                                                                      1098 C
                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                          ø
                                                                                                                                                                                                                                                                                     Matches 3090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                           112
                                                                                                                                                                                                                                                                                                                                                                                                                        19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               952
                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                      BASE COUNT
                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                        AL Nature 420, 563-573 (2002)

S Adachi, J. Alzawa, K. Akimura, T., Arakawa, T., Bono, H., Carninci, P., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, W., Fukuda, S., Furuno, M., Hanagaki, T., Hara, A., Hashizume, W., Hayashida, K., Hayatsu, N., Hiramoto, K., Hiraoka, T., Hirozane, T., Hori, F., Imocani, K., 18hii, Y., Itoh, W., Kagawa, T., Kasukawa, T., Katoh, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M., Nakawai, T., Makamira, M., Nishi, K., Nomura, K., Numazaki, R., Ohno, M., Ohsato, N., Okazaki, Y., Saito, R., Saitoh, H., Sakai, C., Sakai, K., Sakai, K., Sakai, K., Sakai, K., Sakai, Y., Sakai, Y., Sakai, Y., Sakai, Y., Takada, Y., Tagawa, A., Tagawa, A., Tagawa, A., Shizaki, T., Takada, Y., Tanaka, T., Tomaru, A., Toya, T., Yasunishi, R., Direct Submission

Laked, Y., Tagami, M., Tagawa, A., Takahsshi, F., Takaku-Akahira, S., Muramatsu, M. and Hayashizaki, Y., Tagawa, A., Toya, T., Yasunishi, A., Direct Submission

Submitted (16-Juu-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Siener (GSC), RIKEN Yokohama Institute: 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Ukl. Hoto, // Genome esserch Carler (GSC), Rikangawa 230-0045, Japan (E-mail:genome-res@gsc.riken.go.jp/, Tel:s1-45-503-9222,
Hofmann, M., Hume, D.A., Kamiya, M., Lee, N.H., Lyons, P., Marchionni, L., Maatima, J., Mazarelli, J., Mombaerts, P., Nordone, P., Ring, B., Ringwald, M., Rodriguez, I., Sakamoto, N., Saaaki, H., Sato, K., Schonbaeh, C., Seya, T., Shibata, Y., Schorch, F., Suzuki, H., Wynshaw-Borris, A., Yoshida, K.H., Weitz, C., Whittaker, C., Wilming, L., Wynshaw-Borris, A., Yoshida, K., Hasegawa, Y., Kawaji, H., Kohtsuki, S. Functional annotation of a full-length mouse cDNA collection Nature 409 (6821), 685-690 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IPPHLAEEVDRAMAVERVVTLPPRARALKSFVTLSVVAFPIDFRMLGRTQDNSCSFAL
HAHGAAVTRTPGFPNSPYPAHARCQWVLRGDADSVLSLTFRSFDVAPCDEHGSDLV
TVYBSLSPMEPHAVVRLCGTRSPSYNTFLSSSOWYFLVTLITYDRABHRGFBATFFQL
PKMSSCGGFLSDTQGTRSSPYPSFYPTNTNTWNITYWNTKYRYKERLFYLVDPNV
PVGSCTKDYVEINGEKYCGERSQFVVSSNSSKITVHFHSDHSYTDTGFLABTLSSYDSN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KKVEKRGPRRWVVLVAVLFSFLLLSLMAGLLVWHFHYRNVRVQKVFNGHLRITNBIFL
DAVENSTSTEFISLASQVKBALKLLYNEVPVLGPYHKKSAVTAFSEGGVIAYYWSEFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            translation="MGSNRGRKAGGGSQDFGAGLKYNSRLENMNGFEEGVEFLPANNA"
                                                                                                                                                                                                                                                                                               Group Phase I & II Team.
Analysis of the mouse transcriptome based on functional annotation
of 60,770 full-length cDNAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  in Riken
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Rike Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="unnamed protein product; putative suppression of tumorigenicity 14 (colon carcinoma) (MGD|MGI:1338881, GB|NM_011176, evidence: BLASIN, 100%,
                                                                                                                                                                                                                                                                       The FANTOM Consortium and the RIKEN Genome Exploration Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             prepare mouse tissues.

Please visit our web site for further details.
URL:http://genome.gc.riken.go.jp/
URL:http://fantom.gsc.riken.go.jp/.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /protein_id="BAC35125.1"
/db_xref="GI:26342937"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fax:81-45-503-9216)
                                                                                                                                                                                                         21085660
                                                                                                                                                                                                                                   11217851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                     MEDLINE
PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                            JOURNAL
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
                                                                                                                                                          TITLE
JOURNAL
                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
```

```
DPCPGMFMCKTGRCIRKELRCDGWADCPDYSDERYCRCNATHOFTCKNOFCKPLFWVC
DSVNUCGDGSDEEGGSCPAGSFKCSNGKCLPQSQKCNGKDNCGDGSDEASCDSVNVVS
CYTYTRCQNGLCLSKGNPECDGKTDCSDGSDERNCDCGLRSFTKQARVVGGTNADEG
EWPWQVSLHALGQGHLCGASILSPDMLVSAAHCPQDDKNFKYSDYTMWTAFLGLLDQS
KRSASVQELALKRITTHPSRNDFFPYDJALLELEKGVSTVVRFICLPDASTHVFP
AGKAIWVTGWGHTKGGGTGALILQKGRIRVINQTTCEDLMPQQITPRMMCVGFLSGGV
DSCQGDSGGFLSSAEKDGRMFQAGVVSWGEGCAQRNKPGVYTRLPVVRDMIKEHTGV"
                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   720
                                                                                                                                                                                                                                                                                                                                                                                  9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          831
                                                                                                                                                                                                                                                                                                                                                                                                                              CATGGTAGACGGCTGCCCGGAGGGACCACGCGTCTGAGACCGGCGATCGGACCGCCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      232 TCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAGGGGTGTGGAGTTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 CATGGTAGACGGCTGCCCGGAGGGACCACGCGTCTGAGACCGGCGATCGGACCGCCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGCTCTCAGGACTTCGGCGCGCGGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGCGAACAATGCCAAGAAAGTGGAGAAGCGAGGCCCCCAGGCGCTGGGTGCTGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGTGCTGTTCAGCTTCCTCTCCCTCATGGCTGGCTTGCTGGTGGCACTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTATCGGAATGTGCGGGTTCAAAAGTCTTCAATGGCCATCTGAGGATCACAAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAGGGTGTGGAGTTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      412 ATTATCGGAATGTGCGGGTTCAAAAGTCTTCAATGGCCATCTGAGGATCACAAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   472 TCTTTCTGGATGCGTATGAGAACTCCACCACACAGAGTTTATCAGCCTGGCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          592 AGTCGGCTGTAACTGCCTTCAGTGAGGGCAGTCTCATCGCCTACTACTGGTCAGGGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                652 GCATCCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCCATGGCTGTGGAGCTGTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421 TGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTGGGTCCCTACCACAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         532 TGAAGGAGGCGCTGAAGCTGCTGTACAATGAAGTCCCTGTCCTGGGTCCCTACCACAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481 AGTCGGCTGTAACTGCCTTCAGTGAGGCAGTGTCATCGCCTACTACTGGTCAGAGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCATCCCCCCACACCTGGCAGAAGAGGTTGATCGCGCCATGGCTGTGGAGCGAGTTGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGCAGTTTTGCCCTGCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ccarridaccccadaarecrecadaddacrecaddacaacaccacarrirecccrecare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATTGCCACCCCGAGCACGGCACTGAAATCCTTCGTGCTAACATCTGTGGTGGCCTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         712 CATTGCCACCCCGAGCACGGGCACTGAATCCTTCGTGCTAACATCTGTGGTGGCCTTCC
                                                                                                                                                                                                                                                                           Length 4017;
                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                         DB 11;
                                                                                                                                                                                                                                                                                                                          4
```

8 6 8 6 8 6 8 6 8 6 8 6 8 6

1981 TGTGTGGGGCCTCGCTCATCTCCTGACTGGCTCTTGCAGCTCATTGCTTTCAGG 2040 2092 TGTGTGGGGCCTCGCTCTCTCCTGCTCTCTGCAGCTCATTGCTTTCAGG 2151 2091 ATGACAAAAATTTCAAGTACTCAGCTGCTGCTGCTGCTGC 2151 ATGACAAAAATTTCAAGTACTCAGACTACAGATGGTTGCTGCTGC ATGACAAAAAATTTCAAGTACTCAGACTACAGATGGTTGCTGCTGG 2100 ATGACAAAAAATTTCAAGTACTCAGAGTGCAGTGGAGTGGACTGCTGG 2211 ATGACAAAAAATTTCAAGTACTCAGAGTGCAGTGCTGAAAGTTACTAAGTTACAAGTACTAAAAGTTACAAGGTCTAGAGGTCAAAAGTTATAAACTTAAAAGTTAAAAGTTAAAAGTTAAAAGTTAAAAGTTAAAAGTTAAAAAGTTAAAAAGTAAAAAGTAAAAAGTAAAAAGTAAAAAGTAAAAAA	5 7 6	2331 CGGTGGGGAGTACAGCGTCGTCGTCGCCCCATCTGCCTGATGCTACCCATGTCTTCC 2391 2281 CTGCTGGCAAGGCCATCTGGGTCACAGGCTGGGGGACACAAAAGAGGGAGG		2461 CCTGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGAGAAAGATGGGCGAATGTTCC 2520	69 64	AGACAGCCGACCAAAACACCCACAGGATGCCCGACATGCACCTGGATACAGGAGAG 270	ACTGACGACATTTATGCTGGGCCTCCCCCCCAAC 		881 CTGAGCTGGGTGAAGATGATGCTGTCCCGGAGAGCTGCTTCCAACTGTCAC 	941	3001 ACCCCAGRARAGAGTGGTACCTAAGGCTGAAATTGTTTTGCCTGGCGGGGGGGTGGGT
8 6 6 6 6	ठे वे ठे	8 8 8 8	7	y da y	ସ ୪୪ ସ	λο qn d	ò 8 ò	4 & 4 	ò 8	yo da	장 영 장
901 ATAGCCTGAGCCCCATGGAACCCCACGCTGTGGTGCGGCTGTGTGGCACCTTCTCACCCT 960	GTGGCGCCTTTTTTGACTGACCCAAGGGACATTTAGCAGCCCTACTACCAGGCCACT 11	AcceccaAcarcaAcarcaGaAararcaAcarcaCaAcaAccaAccaAcarcaGaAcgraAcgraAcgraAcgraAcgraAcgraAcgraAcgr		CA 144		CG 162	5-5 5	AGAGGGGAATGGCTCTCTGCACAATATACCTACGGCTCCCAAAATGGCTTCGTGTG ACAGGCCAGAAGTGTCTTTGCACCAAATATACCTACGGCTGCCCAAAATGGCCTCTGTCTCTTTTGCTCTTTTTTTT	TGAGCAAGGCCAACCCTGAGTGTGATGGGAAGACGGACTGTAGCGATGGCTCCGATGAGA 1	1861 AAAACTGTGGCTGCGGGTCCTTTACCAAACAGGCTCGCGTGGTTGGT	1921 ATGCGGACGAGGCCAGTGGCCGTGGGAGCTGAGCCTCCACGCCCTGGGCCAGGGCCACT 1980

S P P

දුරු

8 8 8 8 8 8 8 8 8 8 8 8 8 8

Qy Dp

SOURCE ORGANISM

AUTHORS TITLE JOURNAL

REFERENCE

MEDLINE

PUBMED

REFERENCE AUTHORS MEDLINE PUBMED

JOURNAL

TITLE

REFERENCE

PUBMED REFERENCE

AUTHORS

MEDLINE

JOURNAL

TITLE

PUBMED REFERENCE

AUTHORS

TITLE

TITLE JOURNAL

MEDLINE

ACCESSION VERSION KEYWORDS

DEFINITION

RESULT 3 AK085410

```
Muramatsu, M. and Hayashizaki, Y. Direct Submission
Direct Submission
Submitted (16-APR-2002) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genome-resegsc.riken.go.jp, URL:http://genome-gsc.riken.go.jp/, Tel:81-45-503-9222,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /tissue_type="kidney"
/clone_lib="RIKEN full-length enriched mouse cDNA library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Leboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to
                                                                Adachi, J., Alzawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P. Pukuda, S., Furunc, M., Hanagaki, T., Hara, A., Hashizume, W., Fukuda, S., Furunco, M., Hiramoto, K., Hiraoka, T., Hirozane, T., Hayashida, K., Hayatsu, N., Hiramoto, K., Hiraoka, T., Kasukawa, T., Katoh, H., Kawai, J., Kajima, Y., Kondo, S., Konno, H., Kouda, M., Koya, S., Kurihara, C., Matsuyama, T., Miyazaki, A., Murata, M., Nishi, K., Nomura, K., Numazaki, R., Ohno, M., Ohsato, N., Okazaki, Y., Saito, R., Saitoh, H., Sakai, C., Sakai, K., Sakazume, N., Sogabe, Y., Tagami, M., Tagawa, A., Takahashi, F., Takaku-Akahira, S., Tarkeda, T., Tomaru, A., Toya, T., Yasunishi, A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'note="suppression of tumorigenicity 14 (colon carcinoma) (MGD|MGI:1338881, GB|NM_011176, evidence: BLASTN, 100%,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  110 CATGGTAGACGGCTGCCCGGAGGACCACGCGTCTGAGACCGGCGATCGGACCGCCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGCTCTCAGGACTTCGGCGCGCGGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    230 rchagiachacteccescraghenerareachteachteachteachtecrac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301 ATTATCGGAATGTGCGGGTTCAAAAAGTCTTCAATGGCCATCTGAGGATCACAAATGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 CATGGTAGACGGCTGCCCGGAGGACCACGCGTCTGAGACCGGCGATCGGACCGCCAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           170 CCATGGGTAGCAATCGGGGCCGCAAGGCCGGAGGGGGCTCTCAGGACTTCGGCGCGGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCAAGTACAACTCCCGGCTAGAGAACATGAATGGCTTTGAGGAGGGTGTGGAGTTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 11; Length 2689;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 prepare mouse tissues.
Please visit our web site for further details.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30.8%; Score 956.4; DB 11; 76.7%; Pred. No. 1.7e-177; iive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /db_xref="FANTOM_DB:D630022P10"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /dev stage="0 day neonate"
L. .2689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      URL:http://genome.gsc.riken.go.jp/
URL:http://fantom.gsc.riken.go.jp/
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        clone="D630022P10"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               766 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="mRNA"
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              match=720)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  747 C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best_Local Similarity 76.7
Matches 1415, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . .2689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BASE COUNT
ORIGIN
                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kawai, J., Shinagawa, A., Shibata, K., Yoshino, M., Itch, M., Ishii, Y., Arakawa, T., Hara, A., Fukunishi, Y., Komo, H., Adachi, J., Fukuda, S., Arakawa, K., Izawa, M., Nishi, K., Kiyosawa, H., Kondo, S., Yamanaka, I., Saito, T., Gojobori, T., Bono, H., Kasukawa, T., Saito, R., Kadota, K., Matsuda, Y., Gojobori, T., Bono, H., Kasukawa, T., Saito, R., Matsuda, H., Ashburner, M., Barcalov, S., Casavant, T., Kuchl, P., Lewis, S., Matsuo, Y., Nikaido, I., Pesole, G., Quackenbush, M., Schrimt, L.M., Staubli, F., Suzuki, R., Tomita, M., Wagner, L., Washio, T., Sakai, K., Okido, T., Furuno, M., Aono, H., Baldarelli, R., Barsh, G., Blake, J., Boffelli, D., Bojunga, N., Carninci, P., de Bonaldo, M.F., Brownstein, M.J., Bult, C., Fletcher, C., Fujita, M., Gariboldi, M., Gustincich, S., Hill, D., Marchionni, L., Mashio, T., Mazarelli, J., Mombaerts, P., Nordone, P., Ring, B., Ringwald, M., Rodriguez, I., Sakamoto, N., Sasaki, H., Toyo-oka, K., Schombach, C., Seya, T., Shibata, Y., Storch, K.F., Suzuki, H., Toyo-oka, K., Wang, K.H., Weitz, C., Whittaker, C., Wilming, L., Marshizaki, Y., Voshida, K., Hasegawa, Y., Kawaji, H., Kohtsuki, S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishi, K., Kitsunai, T., Tashiro, H., Itoh, M., Sumi, N., Isbhii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Fujiwake, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watahiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsuura, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y. sequencing pipeline with 384 multicapillary sequencer format Genome Res. 10 (11), 1757-1771 (2000)
                                                                                                                                                                                                                    HTC 05-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     genes
                                                                                                                                                                                                             AKO85410 2689 bp mRNA linear HTC 05-DEC-2002 MANS musculus 0 day neonate kidney ODNA, RIKEN full-length enriched library, clone:D6300222Pl0 product:suppression of tumorigenicity 14 (colon carcinoma), full insert sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Group Phase I & II Team,
Analysis of the mouse transcriptome based on functional annotation
of 60,770 full-length cDNAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new Genome Res. 10 (10), 1617-1630 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The FANTOM Consortium and the RIKEN Genome Exploration Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Functional annotation of a full-length mouse cDNA collection Nature 409 (6821), 685-690 (2001)
3172 TIGAGAGTAAAACATTTTATTTTTTTTAGGTAA 3205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         High-efficiency full-length CDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
99279253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Carninci, P. and Hayashizaki, Y.
                                                                                                                                                                                                                                                                                                                                                                           AK085410.1 GI:26102691
HTC, CAP trapper.
Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                  AK085410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10349636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11042159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21085660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11217851
```

1490 CTCACCCTCCTACAACCTGACTTTCCTCCCCAGAACGTCTTCCTTGTCACGCTGAT 1549 1013 AACCAATACTGACCGGGGACATCCTGGCTTTGAGGCCACTTTCTTCCAGCTGCCCAAGAT 1072	193 CGTGAAGGTGCGCTTCAAACTCTTCTATCTGGTGGACCCCAAGGTACCAGTGGGCTCCTG 1252 1730 CGTGAAGGTGCGCTTCTAACTCTTCTATCTGGTGACCCCAACGTACCAGTGGGCTCCTG 1789 1253 CGCGAGGACTATGTGGAGATCATCTGGTGGACCCCAACGTACCAGGGTTTGT 1312	SULT 4 944 bp mRNA linear EST 16-AUG-2002 CUSSION AGENCOURT_8748027 NIH_MGC_130 Mus musculus cDNA clone IMAGE:6335237 5, mRNA Sequence. 944 bp mRNA linear EST 16-AUG-2002 FORTHOL S, mRNA Sequence. 948 bp mRNA clone IMAGE:6335237 948 bp mRNA clone IMAGE:6335237 948 bp mRNA clone IMAGE:6335237 808 bp mRNA clone IMAGE:6335237 809 bp mRNA clone IMAGE:6335237 809 clone IMAGE:635237 809 clone IMAGE:635237 809 clone IMAGE:635237 809 clone Clone IMAGE:635237 809 clone IMAGE:635237 809 clone IMAGE:635235 809 clone IMAGE:635235 809 clone IMAGE:635235 809 clone IMAGE:63525 800 clone I	ψ.
8 8 8 8 8 8	6 6 6 6 6 6 6	RESULT 4 BQ88551 LOCUS DEFINITION ACCESSION VERSION KEYWORDS SOURCE ORGANISM REFERENCE AUTHORS TITLE JOURNAL COMMENT	FEATURES source
	TIGITA 59 TIGITA 70 CCTTC 65 CCTTC 76 CCTTC 88	660 659 890 CCTTTTGGGTAATAGGGAGGCAAGAGTAAAGAATTGTCTGGGGTAAAATGTTTGCCT 949 660	190 CGGGGGCTGCAGGCTTCCTTCCATCTCCCCACAGCTGCAGTTTTGC 1249 1250 CGGGGGCCTGCAGTTTTGC 1249 1250 CTGCATGCCTGCGTGCAGTTTTGC 1249 1250 CTGCATGCCCTGGCGGGGGCCTCCCCCCCACAGGTCC 1309 1250 CCTGCATGCCTGCGGGGGGGGGGCCTCCCCCCCACAGGTCC 1309 1310 CTACCCGGCGCATGCCGGCGGGGGGGGGGGGCGCTCTGTGCTGAG 1369 1310 CTACCGGGCGCATGCCGGCTGCCAGTGGGTCCTGGGGGGGG

à qq QQ

à P ò

à

qq

 δ g à g ð Dp à qq δ g

```
BI688367
603316692F1 NCI_CGAP_Mam6 Mus musculus cDNA clone IMAGE:5356487 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1405 ACTCCAACGACCCGTGCCCAGGGATGTTCATGTGCAAGACTGGACGGTGCATCCGAAAGG 1464
                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Robert Strausberg, Ph.D.

Email: Gapbs-r@mail.nih.gov
Tissue Procurement: Jeffrey Green M.D.

Tissue Procurement: Jeffrey Green M.D.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC. clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://inage.llnl.gov
Plate: LLAM11906 row: h column: 24

High quality sequence stop: 831.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACTGCGCTGCGACGCCTGGCCAGACTGCCCGGATTATAGTGATGAGCGTTACTGCCGAT 1524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /clone_lib="NGI_CGAP_Mam6"
/note="Organ: mammary; Vector: pCMV-SPORT6; Site_1: SalI;
Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT.
Library constructed by Life Technologies. Investigator
providing samples: Jeffrey Green, M.D., NIH"
                                                                                                                                                                                                                                Mus musculus
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1165 GGAATATCAAGGTGCCCAACAACGGAACGTGAAGGTGCGCTTCAAACTCTTCTATCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 GGAATATCAAGGTGCCCAACAACCGGAACGTGAAGGTGCGCTTCAAACTCTTCTATCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 TGGACCCCAACGTACCAGTGGGCTCCTGCACCAAGGACTATGTGGAGATCAACGGGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 AGTACTGCGGTGAGAGGTCCCAGTTTGTGGTGAGCAGCAGCAACAGCAGCAAGATTACAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1345 ACTICCATICIGAICACICGIACACGGACACCGGGIICCIAGCIGAGIACCICTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1225 IGGACCCCAACGIACCAGIGGGCICCIGCACCAAGGACTAIGIGGAGAICAACGGGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1285 AGTACTGCGGTGAGAGGTCCCAGTTTGTGGTGAGCAGCAACAGCAGCAAGATTACAGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181 ACTICCATICTGATCACTCGTACACGGACACCGGGTTCCTAGCTGAGTACCTCTCCTACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241 ACTCCAACGACCCGTGCCCAGGGATGTTCATGTGCAAGACTGGACGGTGCATCCGAAAGG
                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 884)
NTH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .884
/organism="Mus musculus"
/organism="Mus musculus"
/mol type="mRNA"
/strain="FVB/N"
/db_xref="taxon:10090"
/clone="IMAGE:5356687"
/sex="female, virgin"
/tissue_type="infiltrating ductal carcinoma"
/dev stage="5 months"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26.8%; Score 833.6; DB 12; Length 884; 98.6%; Pred. No. 2.7e-153; tive 0; Mismatches 9; Indels 3;
                                                                                                                                                                                                      Mus musculus (house mouse)
                                                                                                                                         BI688367.1 GI:15650996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 872; Conservative
                                                                                mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1465
                                                                                                                                                                                                SOURCE
ORGANISM
                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                         ACCESSION
                                                                                                                                   VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ы
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                   2
                                                                                                                                                                                                                                                                                                       GGAGGGGGCTCTCAGGACTTCGGCGCGGGACTCCAAGTACAACTCCCCGGCTAGAGAACATG 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 269
                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                          150 AATGGCTTTGAGGAGGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAAGTGGAAAAG 209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCATGGCTGGCTTGCTGTGGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAAGTC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGCAT-GGCAGTGACCTGGTCACCGT-GTATGATAGCCTGAGCCCCATGGAACCCCAAG
                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                          1 GCGTCTGAGACCGGCGATCGGACCGCGAAACCATGGGTAGCAATCGGGGCCGCAAGGCC
                                                                                                                                                                                                                                                                                                                                                       61 GGAGGGGCTCTCAGGACTTCGGCGCGACTCAAGTACAACTCCCGGCTAGAGAACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 AATGGCTTTGAAGGAGGGTGTGGAGTTCCTGCCTGCGAACAATGCCAAGAAGTGGAGAAG
                                                                                                                                                                                30 GCGTCTGAGACCGGCGATCGGACCGCCAAAACCATGGGTAGCAATCGGGGGCGCAAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGAGGCCCCAGGCGCTGGTGCTGGTGGCAGTGCTTCAGCTTCCTCTTGCTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCATGGCTGGCTTGCTGTGGCACTTCCATTATCGGAATGTGCGGGTTCAAAAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCAATGGCCATCTGAGGATCACAAATGAGATCTTTCTGGATGCGTATGAGAACTCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCACAGAGTTTATCAGCCTGGCCAGCCAGGTGAAGGAGGCGCTGAAGCTGCTGTACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCACAGAGTTTATCAGCCTGGCCAGCCAGGTGAAGGAGGCGCTGAAGCTGCTGTACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAGTCCCTGTCCTGGGTCCCTACCACAAGAAGTCGGCTGTAACTGCCTTCAGTGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAGTCCCTGTCCTGGGTCCCTACCACAAAAAGTCGGCTGTAACTGCCTTCAGTGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATCGCGCCATGGCTGTGGAGCGAGTTGTAACATTGCCACCCCGAGCACGGGCACTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCTTCGTGCTAACATCTGTGGCCTTTCCCCATTGACCCCAGAATGCTGCAGAGGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACCATGGGCATTGCCCTGGCCCCCGTGGTATGATAACCCTGAGCCCCATGGGACCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGTCATCGCCTACTACTGGTCAGAGTTCAGCATCCCCCCACACCTGGCAGAAGAGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCCTGGCTTCCCCAACAGTCCCTACCCGGCGCATGCCCGCTGCCAGTGGGTCCTGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGGACGCCGACTCTGTGCTGAGCCTCCCGAAGCTTTGATGTCGCTCCTGTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGTGTCATCGCCTACTACTGGTCAGAGTTCAGCATCCCCCCACACGTGGCAGAAGAGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCTTCGTGCTAACATCTGTGGTGGCCTTCCCCCATTGACCCCCAGAATGCTGCAGAGGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGGACAACAGCTGCAGTTTTGCCCTGCATGCCCATGCAGCAGCAGTGACACGCTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Acceptaceración de actividades de act
                                                                                                                                      Gaps
                                                                                                                                5,
                                                                         Length
                                                                                                                                32; Indels
                                                                   DB 13;
                                                            Score 843.8; DB 13
Pred. No. 2.7e-155;
                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGTGGTGCGGCTGTGTGG 946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cccrecrecrecedecrre 919
                                                         27.2%;
                                      Query Match
Best Local Similarity 96.3
                                                                                                                                                                                                                                                                                                          90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             069
ORIGIN
```

1224

.;

a

8 g ð 임 ਨੇ Ωp ð g ò

à g à 09

1284

120

1344

180

1404

240

300

GCAATGCCACCCACCAGTTCACGTGCAAAACCAGTTCTGCAAGCCCCTCTTCTGGGTCT 1584

1525

g

301 AACTGCGCTGCGACGCTGGCCAGACTGCCCGGATTATAGTGATGAGCGTTACTGCCGAT

RESULT 5 \$1688367

g

qq δ g

à

셤 ŏ d ð d à d à g

ò

```
Ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1014 ACCAATACTGACCGGCGACATCCTGGCTTTGAGGCCCACTTTCTTCCAGCTGCCCAAGATG 1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1074 AGCAGCTGTGGCGGCTTTTTGAGTGACACCCAAGGGACATTTAGCAGCCCCCTACTATTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1134 GGCCACTACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAACAACCGGAAC 1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1433
         /lab_host="DH10B"

/clone_lib=NGI CGAP Mam6"

/note="Organ: mammary Vector: pCMV-SPORT6; Site_1: Sall;

Site_2: Not1; Cloned unidirectionally. Primer: Oligo dT.

Library constructed by Life Technologies. Investigator

Library constructed by Life Technologies. Investigator

providing samples: Jeffrey Green, M.D., NIH"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1314 GTGAGCAGCAACAGCAGCAAGATTACAGTCCACTTCCATTCTGATCACTCGTACAGGAC 1373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EST 21-AUG-2002
                                                                                                                                                                                                                                                                                                                                                          CIGCATGCCCATGCAGAGAGAGAGACGCTTCACTACCCCTGGCTTCCCCAACAGTCCC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGTATGATAGCCTGAGCCCCATGGAACCCCACGCTGTGGCGGCCTGTGTGGCGCACCTTC 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGCATGCCCATGGTGCAGCAGTGACACGCTTCACTACCCCTGGCTTCCCCAACAGTCCC 773
                                                                                                                                                                                                                                                                                                                                                                                                               833
                                                                                                                                                                                                                                                                                                                                                                                                                                            TACCCGCCGCATGCCCGCTGCCAGTGCGTCCTGCGGGGGGGCCCCGACTCTGTGCTGAGC 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                      GCCTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGCAGTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCACCTTCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCCAGTGACCTGGTCACC
                                                                                                                                                                                                                                                                                 GCTTTCCCCATTGACCCCAGAATGCTGCAGAGGACTCAGGACAACAGCTGCAGTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                       TACCCGCCGATGCCCGCTGCCAGTGGGTCCTGCGGGGGACGCCGACTCTGTGCTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTCACCTTCCGAAGCTTTGATGTCGCTCCCTGTGATGAGCATGGCAGTGACCTGGTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGTATGATAGCCTGAGCCCCCATGGAACCCCCACGCTGTGGTGCGGCTGTGTGGCACCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCACCCTCCTACAACCTGACTTTCCTCCTCCCAGAACGTCTTCCTTGTCACGCTGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1194 GTGAAGGTGCGCTTCAAACTCTTCTATCTGGTGGACCCCAACGTACCAGTGGGCTTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541 Greaagerecerreaacrerrerareregregaceceaaceraceregeerecree
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1254 ACCAAGGACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGAGGTCCCAGTTTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661 GTGAGCAGCAACAAGCAAGATTACAGTCCACTTCCATTCTGATCACTGCTACACAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1374 ACCGGGTTCCTAGCTGAGTACCTCTCCTACGACTCCAACGACCCGTGCCCAGGGATGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481 GGCCACTACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAACAACGGAAC
                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                       1;
                                                                                                                                                                            25.4%; Score 788.8; DB 12; Length 803; larity 99.6%; Pred. No. 1.7e-144; Conservative 0; Mismatches 2; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ďq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1434 ATGTGCAAGACTGGACGGTGCATC 1457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                         170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BQ951529
                                                                                                                                                                                                               801;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  954
                                                                                                                                                                                                                                                      654
                                                                                                                                                                                                                                                                                           Н
                                                                                                                                                                                                                                                                                                                                714
                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         894
                                                                                                                                                                                                                                                                                                                                                                                                       774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                 Local
                                                                                                                                                                                             Best Loca
Matches
                                                                                                                     BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 7
BQ951529
LOCUS
                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                  Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                              1644
                                                                                                                                                                                                                                                                                       1823
                                                                                                                                                                                                       1705 ACAACTGTGGAGATGGGTCTGACGAGGCTTCATGTGACAGCGTGAATGTCGTCTTTGCA 1764
                                                                                                                                                                                                                                                                                                                                                        1824 GATGGGAAGACGGACTGTAGCGATGGCTCCGATGAGAAAACTGTGACTGTGGCTGCGA 1883
                                                                                                                                                                                                                                                                                                                                                                                                                                  1884 TCCTTTACCAAACAGGCTCGCG-TGGTTGGTGGCACGAATGCGGACGAGGGCGAGTGGCC 1942
                                                                                                                                 GGAGTTTCAAGTGTTCCAATGGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGG 1704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BI690615
60314210F1 NCI_CGAP_Mam6 Mus musculus cDNA clone IMAGE:5354067 5',
                                                                                540
                                                                                                                                                                                                                                                    009
                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGGCAGGTCAGCCTCCAAGCCCTGGGGCCACGTTGTGTGGGGGCTCGCTTCATCT 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus
Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
GTGACAGTGTCAACGACTGTGGGGACGGAAGTGACGAGGAGGGCTGCAGCTGTCCTGCTG
                                                                                                                                                          GGAGTTTCAAGTGTTCCAATGGGAAGTGTCCCTCAGAGCCAGAAGTGTAATGGGAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                          541 ACAACTGTGGAGATGGGTCTGACGAGGCTTCATGTGACAGGGTGAATGTCGTCTCTTGCA
                                                                                                                                                                                                                                                                                 CCAAATATACCTACCGCTGCCAAAATGGCCTCTGTGAG-CAAGGGCAACCCTGAGTGT
                                                                                                                                                                                                                                                                                                                   CCAAATATACCTACCGCTGCCAAAATGGCCTCTGTCTGAGGCCAAGGGCAACCCTGAGTGT
                                                                                                                                                                                                                                                                                                                                                                                             GAIGGGAAGACGGACTGIAGCGAIGGCTCCGAIGAGAAAAACTGIGACTGIGGGCTGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGCAGGTGAGCCTCCACGCCCTGGGCCAGGGCCACTTGTGTGGGGGCCTCGC-TCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: Jeffrey Green M.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LINL at:
http://image.lnn.gov
Plate: LiAmilgoo row: d column: 04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 803)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Mus musculus"
/mol type="mRNA"
/strain="PNN"
/db xref="taxon:10090"
/clone="IMAGE:5354067"
/sex="female, virgin"
/tissue_type="infiltrating ductal carcinoma"
/dev_stage="5 months"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CICCIGACIGGICTCIGCAGCICATIGCITICAGGAIGAC 2045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                755.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        High quality sequence stop: 7
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BI690615.1 GI:15653244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BI69063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EST.
                                                                                                                                 1645
                                                                                                                                                                                                                                                                                 1765
                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2002
                                                          1585
                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                               199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 6
BI690615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
```

ð q

480

540

1579

900

1638

1697

720

1754

1814

780

1874

```
роэдэр17
602823173F1 NCI_CGAP_Mam6 Mus musculus cDNA clone IMAGE:4951962 5',
mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         896 GGGCTGGGACCCTTACCAAAAGGCTTCCCGGGTTGGTGGCCAAGCNCCCCCAACAAGGG 955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus
Mus musculus
Mus musculus
Mus musculus
Mus musculus
Mammalia; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Musi
1 (Dases 1 to 762)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                     661 CTGCTGGGAGTTTCAAGTGTCCCAATGGGAAGTGTCTCCCTCAGAGGCCAGAAGTGGTAAT
                                                                                                                                                                                                                                                .521 CGATGCAATGCCACCACCAGTTCACGTGCAAAAACCAGTTCTGCAAGCCCCT-CTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721 GGGAAGGACNCCTGTTGGGAGATGGGTCTGACGAGGCTTCATGTGAACAGCGTGAATGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1875 GGGCTGCGATCCTTTACCAAACAGGCTCGCGTGGTTGGTGGCACGAATGCGGACGAGGGC
                                                                                                                                                                                      481 AAGGAACTGCGCTGCGACGGCTGGGCAGACTGCCCCGGATTATAGTGATGAGCGTTACTGC
                                                                                                                                                                                                                                                                                                        541 CGATGCAATGCCACCCACCAGTTCACGTGCAAAACCAGTTCTGCAAGCCCCTTCTG
                                                                                                                                                                                                                                                                                                                                                                   1580 GGTCTGTGACAGTGTCAACGACT-GTGGGGACGGAAGTGACGAGGAGGGCTGCAGCTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                          GGTCTGTGACAGTGTCAACGACTGGTGGGGAAGTGACGAGGAGGAGGCTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGCTGGGAGTTTCAAGTGTTCCAATGGGAAGTGTCTCCCTCAGAGCCAGAAGT-GTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGAAGGACAACTGT--GGAGATGGGTCTGACGAGGCTTCATGTG-ACAGCGTGAATGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781 GTCTCTTGCACC-AATAIACCTACCGCTGGCAAAATGG-CTCTGTCTGAGC-AGGGCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTGAGTGTGAAAGACGGACTGTAGCGATGGCTCCGATGAGAAAACTGTGACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      838 CTTGATTGGGATGGGAAGACGGACTGTACCGATGG-TCCGATGAAAAAAC-GGGAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Robert Strausberg, Ph.D.

Email: cgapbs-r@mail.nih.gov
Trissue Procurement: Jeffrey Green M.D.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MCC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://magal.llh.gov
Plate: LLAM10909 row: a column: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1935 GAGTGGCCCTGGCAGGTGAGCCTCCACGCCCTGGG 1969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              956 CAGGGCCCCGTGGAGGGGACCTCCCGGCCGTGG 990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Mus musculus"
/mol_type="MRNA"
/strain="FVB/N"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         High quality sequence stop: 727
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BG919617.1 GI:14300093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BG91961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EST
                                                                                                                              1461
                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 8
BG919617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                           ठ
                                                                                                                                                                                g
                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /wol type="mRRM"
/strain="FVB/N"
/db_xref="Laxon:10090"
/dlone="IMAGE:6475074"
/lab host="DH10B (T1 phage-resistant)"
/clone=limAGE:075074"
/clone lib="NCI CGAP_CO24"
/clone lib="NCI CGAP_CO24"
/note="Organ: colon; Vector: pCMV-SPORT6; Site_1: Not1;
Site_2: Sal1; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.6 kb. Constructed by Life
Technologies. Note: this is a NCI CGAP Library."
29 a 272 c 286 g 201 t 2 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITGAGGCCACTITCTICCAGCTGCCCAAGATGAGCAGCTGTGGCGGCTTTTTGAGTGAC 1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTCCACTTCCATTCTGATCACTCGTACACGGACACCGGGTTCCTAGCTGAGTACCTCTCC 1400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1401 TACGACTCCAACGACCCGTGCCCAGGGATGTTCATGTGCAAGACTGGACGGTGCATCCGA 1460
                                                                                                                                                    Mus musculus (house mouse)
Mus musculus
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
I (bases 1 to 990)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09
                                                                                                                                                                                                                                                                                                                                                                                                                                Consolin November Consoling the Copy of th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCTCCCAGAACGTCTTCCTTGTCACGCTGATAACCAATACTGACGGGGGGACATCCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 TCCTCCCAGAACGTCTTCCTTGTCACGCTGATAACCAATACTGACGGGGGAACATCCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACAIGGAATATCAAGGIGCCCAACAACCGGAACGIGAAGGIGCGCTTCAAACTCTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAAGTACTGCGGTGAGAGGTCCCAGTTTGTGGGTGAGCAGCAACAGCAGCAAGATTACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTGAGGCCACTTTCTTCCAGCTGCCCAAGATGAGCAGCTGTGGCGGCTTTTTTGAGTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCCAAGGGACATTTAGCAGCCCCTACTATCCAGGCCACTACCCGCCCAACATCAACTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCCAAGGGACATTTAGCAGCCCCTACTATCCAGGCCACTACCCGCCCAACATCAACTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1161 ACATGGAATATCAAGGTGCCCAACAACGAACGTGAAGGTGCGCTTCAAACTCTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGGTGGACCCCAACGTACCAGTGGGCTCCTGCACCAAGGACTATGTGGAGATCAACGGG
AGENCOURT 8952916 NCI CGAP Co24 Mus musculus cDNA clone
IMAGE:6475074 5', mRNA sequence.
BQ951529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25.1%; Score 778.2; DB 13; Length 990; llarity 92.9%; Pred. No. 1.9e-142; Conservative 0; Mismatches 60; Indels 11;
                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       organism="Mus musculus"
                                                                                                                     BQ951529.1 GI:22367007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Simi
les 924;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
Matches
                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BASE COUNT
                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                      ACCESSION
                                                                                                                  VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            P
P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
```

```
CB208872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                             SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BASE COUNT
ORIGIN
   DEFINITION
                                                       ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1281
                                                                                                                                                                                                                                                                                                                                                                                                                                            ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TIGAGGCCACITICTICCAGCTGCCCAAGAIGAGCAGCTGTGGCGGCTTTTTGAGTGACA 1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATGGAATATCAAGGTGCCCAACAACCGGAACGTGAAGGTGCGCTTCAAACTCTTCTATC 1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1282 AGAAGTACTGCGGTGAGAGGTCCCAGTTTGTGGTGAGCAGCAACAGCAGCAAGATTACAG 1341
                     /gex="female, virgin"
/tissue_type="infiltrating ductal carcinoma"
/dev_grage="s_months"
/lab_host="DH10B"
/lab_host="DH10B"
/clone_lib="NOT_CGAP_Mam6"
/note="Yogan: mammary; Vector: pCMV-SPORT6; Site_1: Sall; Site="Not1; Cloned unidirectionally. Prime: Oligo dT. Library constructed by Life Technologies. Investigator providing samples: Jeffrey Green, M.D., NIH"
a 243 c 190 g 165 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1342 TCCACTTCCATTCTGATCACTCGTACACGGACACCGGGTTCCTAGCTGAGTACCTCTCT 1401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601 AGAAGTACTGCGGTGAGAGGTCCCAGTTTGTGGTGAGCAGCAACAGCAGCAAGATTACAG 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rccacirccarrergarcacregracaegacaeceggricerageregagiaecreeer 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTTCACTACCCCTGGCTTCCCCCAACAGTCCCTACCCGGGGGGGATGCCCGCTGCCAGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCTGCGGGGGGACGCCGACTCTGTGCTGAGCCTCACCTTCCGAAGCTTTGATGTCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTGTGATGAGCATGGCAGTGACCTGGTCACCGTGTATGATAGCCTGAGCCCCATGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTCCCAGAGCGTCTTCCTTGTCACGCTGATAACCAATACTGACCGGCGACATCCTGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTCCCAGAACGTCTTCCTTGTCACGCTGATAACCAATACTGACCGGCGACATCCTGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TIGAGGCCACTITCITCTCCAGCTGCCCAAGATGAGCAGCTGTGTGTTTTTGAGTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCAAGGGACATTTAGCAGCCCCTACTATCCAGGCCACTACCGCCCCAACATCAACTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541 TGGTGGACCCCAACGTACCAGTGGGCTCCTGCACCAAGGACTATGTGGAGATCAACGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                682 AGAGGACTCAGGACAACAGCTGCAGTTTTGCCCTGCATGCCCATGGTGCAGCAGTGACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 AGAGGACTCAGGACAACAGCTGCAGTTTTGCCCTGCATGCCCATGGTGCAGCAGCAGTGACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTTCACTACCCCTGGCTTCCCCCAACAGTCCCTACCCGGCGCGCTGCCCGCTGCCAGTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCTGCGGGGGGACGCCGACTCTGTGCTGAGCCTCACCTTCCGAAGCTTTGATGTCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTGTGATGAGCATGGCAGTGACCTGGTCACCGTGTATGATAGCCTGAGCCCCATGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cccacecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaecracaec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCCAAGGGACATTTAGCAGCCCCTACTATCCAGGCCACTACCCGCCCAACATCAACTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGGAATATCAAGGTGCCCAACAACGGAACGTGAAGGTGCGCTTCAAACTCTTCTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGTGGACCCCAACGTACCAGTGGGCTCCTGCAAGGACTATGTGGAGATCAACGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCACGCTGTGGTGCGGCTGTGTGGCACCTTCTCACCCTCCTACAACCTGACTTTCCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                              Score 760.4; DB 12; Length 762;
Pred. No. 6.4e-139;
0; Mismatches 1; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1402 ACGACTCCAACGACCCGTGCCCAGGGATGTTCATGTGCAAGA 1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACGACTCCAAAGACCCGTGCCCAGGGATGTTCATGTGCAAGA
/clone="IMAGE:4951962"
                                                                                                                                                                                                                                                                                                                                                                              24.5%;
                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 99.9
Matches 761; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                        BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
```

EST 16-MAY-2003

linear

mRNA

874 bp

CB208872

RESULT 9 CB208872 LOCUS

```
// mol_type="maxm" | // dlone="lmAdE:30241011" | // dlone="lmAdE:30241011" | // dlone="lmAdE:30241011" | // dlone="lmAdE:30241011" | // dlone="lmAdE:"DHIND | // dlone="lone" | // dlone="lone" | // more 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTGCAGCTGTCCTGCTGGAGTTTCAAGTGTTCCAATGGGAAGTGTCTCCCCTCAGAGCC 1686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGAAGTGTAATGGGAAGGACAACTGTGGAGATGGGTCTGACGAGGCTTCATGTGACAGCG 1746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGAGTACCTCTCCTACGACTCCAACGACCCGTGCCCAGGGATGTTCATGTGCAAGACTG 1446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGGCGAGGACTGCCCGGATTATAGTG 1506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGGCCAGACTGCCCGGATTATAGTG 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 ATGAGCGTTACTGCCGATGCAATGCCACCCAGTTCACGTGCAAAAACCAGTTCTGCA 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAAGTGTAATGGGAAGGACAACTGTGGAGATGGGTCTGACGAGGCTTCATGTGACAGGG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NIH-MGC http://mgc.nci.nih.gov/.

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished

On Feb 4, 2003 this sequence version replaced gi:28250435.

Contact: Robert Strausberg, Ph.D.
Bmail: cgapbs-rømail.nih.gov

Tissue Procurement: Dr. David Rowe and Dr. Mina
cDNA Library Preparation: Invitrogen Corp
cDNA Library Preparation: Invitrogen Corp
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
Plate: NDAM0308 row: g column: 04
High quality sequence stop: 655.
                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Musinae; Mus
1 (bases 1 to 874)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGAGCGTTACTGCCGATGCAATGCCACCCACCAGTTCACGTGCAAAAACCAGTTCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGTGGGGGACGGAAGTGACGAGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGTGGGGACGGAAGTGACGAGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 759.4; DB 14; Length 874; Pred. No. 9.8e-139; 0; Mismatches 7; Indels 2;
clone
AGENCOURT 11350695 NIH MGC 164 Mus musculus cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Mus musculus"
                                             MAGE:30241011 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
1. .874
                                                                                                                                                                                                                                                         Mus musculus (house mouse)
Mus musculus
                                                                                                                                                         CB208872.2 GI:29133712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 98.9
Matches 785, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
```

ġ,

3;

Gaps ., ., 75 9 120

180 255 240 315 300 375 360 435

a

g

ò

a

ò

g ઠે 셤 ò

ਨੇ

```
BY756896 17-DEC-2002
BY756896 RIKEN full-length enriched, blastocyst Mus musculus cDNA
clone 11C0035F06 3', mRNA sequence.
                                                                                                                                                                                                                                                                                    76 GGGGCGCGAAGGCCGGAGGGGCTCTCAGGACTTCGGCGCGGGACTCAAGTACAACTCCC 135
                                                                                                                                                                                                                                                                                                                                                                   Library constructed by Life Technologies. Investigator providing samples: Jeffrey Green, M.D., NIH"

223 c 240 g 168 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 TCCTCTTGCTCTCCCTCATGGCTGGCTTGCTGGTGTGGCACTTCCATTATCGGAATGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          676 TGCTGCAGAGGACTCAGGACAACAGCTGCAGTTTTGCCCTGCATG-CCCATGGTGCAGCA
Site_2: NotI; Cloned unidirectionally. Primer: Oligo
                                                                                                                                                                                                                                 1 CCCGGAGGGACCACGCGTCTGAGACCGCGATCGGACCGCCAAAACCATGGGTAGCAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       436 AGCTGCTGTACAATGAAGTCCCTGTCCTGGGTCCCTACCACAAGAAGTCGGCTGTAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421 AGCTGCTGTACAATGAAGTCCCTGTCCTGGGTCCCTACCACAAGAAGTCGGCTGTAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                496 CCTTCAGTGAGGGCAGTGTCATCGCCTACTACTGGTCAGAGTTCAGCATCCCCCCACACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTTCAGTGAGGGCAGTGTCATCGCCTACTAGTGGTCAGAGTTCAGCATCCCCCCCACACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              556 TGGCAGAAAGAGGTTGATCGCCCCATGGCTGTGGAGCGAGTTGTAACATTGCCACCCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541 TGGCAGAAGAGTTGATCGCGCCATGGCTGTGGAGCGAGTTGTAACATTGCCACCCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACGGGCACTGAAATCCTTCGTGCTAACATCTGTGGTGGCCTTCCCCCATTGACCCCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601 CACGGGCACTGAAATCCTTCGTGCTAACATCTGTGGTGGCCTTCCCCATTGAGCCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661 TGCTGCAGAGGACTCAGGACAACAGCTGCAGTTTTTGCCCTGCATGCCCCATGGTGCAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          735 GTG-ACACGCTTCACTACCCCTGGCTTCCCCAACAGTCCCTACCCGGCGCATGCCCGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 GGGGCGCAAGGCCGGAGGGCTCTCAGGACTTCGGCGCGGGGACTCAAGTACAACTCCC
                                                                                                                                                                                                                                                                                                                                                                                          181 AGAAAGTGGAGAAAGCGAGGCCCCAGGCGCTGGTGCTGGTGCTGGCGCAGTGCTGTTCAGCT
                                                                                                                                                                                                        16 CCCGGAGGGACCACGCGTCTGAGACCGGCGATCGGACCGCCAAAACCATGGGTAGCAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                    196 AGAAAGTGGAGAAGCGAGGCCCCAGGCGCTGGTGGTGGTGGTGGCAGTGCTGTTCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCTCTTGCTCCCTCATGGCTGGCTTGCTGGTGTGGCACTTCCATTATCGGAATGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGTTCAAAAAGTCTTCAATGGCCATCTGAGGATCACAAATGAGATCTTTCTGGATGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301 GGGTTCAAAAAGTCTTCAATGGCCATCTGAGGATCACAAATGAGATCTTTCTGGATGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                               Indels
                                                                                                                                                                 8
                                                                                                                     Score 747.2; DB 12
Pred. No. 2.5e-136;
0; Mismatches 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   794 CCAGTGGGTCCTGCGG 809
                                                                                                                       Query Match 24.1%;
Best Local Similarity 98.6%;
Matches 785; Conservative
                                                             167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
DEFINITION
                                                               COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
BY756896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                             BASE CC
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                          ਨੇ
                                                                                                                                                                                                                                                                                      ਨੇ
                                                                                                                                                                                                                                                                                                                                                                   ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       603289385F1 NCI_CGAP_Mam6 Mus musculus cDNA clone IMAGE:5323485 5', B1664081.1 GI:15578314
                                                                                                                                                                                                                                              1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2165
                                                                                1866
                                                                                                                                                               1926
                                                                                                                                                                                                                                                                                                                                                                                                             2106
  /sex="female, virgin"
/tissue_type="infiltrating ductal carcinoma"
/dev_stage="5 months"
/lab_host="DH108"
/clone_lib="NCI_CGAP_Mam6"
/note="Organ: mammary; Vector: pCMV-SPORT6; Site_1: Sal1;
                                                                                                                         480
                                                                                                                                                                                                                                                                                    009
                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EST.

Mus musculus (house mouse)

Mus musculus

Mus musculus

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

I (bases 1 to 798)

INH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Jeffrey Green M.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LINL at:
http://inage.llh.gov
Plate: LiAMIB20 row: i column: 22
High quality sequence stop: 771.
                                                                                                                                                                                                                                                                                                                                                GGGCCTCGCTCATCTCTCTGACTGGCTGGTCTCTGCAGCTCATTGCTTCATGAGATGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAATITTCAAGTACTCAGACTACACGATGTGGACGGCCTTCCTGGGTCTGCTGGACC-GA
                                    GCAAGCGCAGTGCCTCTGGGGTGCAGGAGCTGAAGCTCAAACGTATCAT-CACCCACCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAAGCGCCAGTGCCTCTGGGTGCAGAGCTGAAACTCATACGTATCATCCGCCCACGT
                                                                                                                                                             ACGAGGGCGAGTGGCCCTGGCAGGTGAGCCTCCACGCCCTGGGCCAGGGCCACTTGTGTG
                                                                                                                                                                                                                                                                                    ACGAGGGCGAGTGGCCCTGGCAGGTGAGCCTCCACGCCCTGNGCCAGGCCACTTGTGTG
                                                                                                                                                                                                                                                                                                                             GGGCCTCGCTCATCTCTCTGACTGGCTGGTCTCTGCAGCTCATTGCTTTCAGGATGACA
                                                                                                                                                                                                                                                                                                                                                                                                           2047 AAAATTTCAAGTACTCAGACTACACGATGTGGACGGCCTTCCTGGGTCTGCTGGACCAGA
                                                                                AGGGCAACCCTGAGTGTGATGGGAAGACGGACTGTAGCGATGGCTCCGATGAGAAAACT
                                                                                                          AGGGCAACCCTGAGTGTGATGGGAAGACGGACTGTAGCGATGGCTCCGATGAGAAAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 þe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Mus musculus"
/mol_type="mRNA"
/strain="FVB/N"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      clone="IMAGE:5323485"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCTTCAATGATTT 2179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCTTCAATGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
  1747
                                                                                                                     421
                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                          1987
                                                                                                                                                                                                                                                                                                                                                                 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2166
                                        361
                                                                                1807
                                                                                                                                                             1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                            1927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BI664081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
```

420 495 480 555 540 615 009 675 099

09

ö

Gaps

;

Length 746;

2522

2582

```
GAGCCCTATGGGAGGAGGAGCTCAGGTCACTCTTTTCAGGAAGCGCCCAGCCCTAGGAAC 3002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS B1416218 846 bp mRNA linear EST 14-AUG-2001
DEFINITION 602989878F1 NCI_CGAP_Lu33 Mus musculus cDNA clone IMAGE:5145762 5',
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2343 CTGATCCTGCAGAAGGGTGAGATCCGTGTCAACCAGACCACCTGTGAGGACCTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 CCGCAGCAGATCACCCCCACGAATGATGTGTGTGGGGTTTCCTCAGTGGGGGTGTGGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGAGAAGATGGGGCGAATGTTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTGGTGTGGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAACAAGCCAGGCGTGTACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2583 AGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGGGGTATAGCAGCATGGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGCTCCCTGTAGTTCGGGACTGGATCAAAGAGCACACTGGGGTATAGCAGCATGGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCCTTAGGACTCAGAGITCTTCCAAAGTGGGACCCCCTCAAGAGTTGGAGAGAGAACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 crgarcnrgcagnaacgrgagarccgrgrcarcaacagaccacacarcrgagacccrcars
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCGCAGCAGATCACCCCACGAATGATGTGTGTGGGTTTCCTCAGTGGGGGTGTGGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGAGAAGATGGTGCTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2643 ACAGCCGACCACAAACACCCACAGGGATGCCCGACATGCACACCTGGATACAGGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301 ACAGCCGACCACACACCCACAGGGATGCCCGACATGCACACCTGGATACAGGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACACTGACGACATTTATGCTGTGGCCTCCCCCCCCAACACACAACCCAGACTGTGAACTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCGTGCTAGCGGCCCAGCCTGGGGGCAAGGGTTTGATGGCAGCCTTCCCCCCTCTAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGCTGGGTGAAGATGATGCTGTCCCGGAGAGCTGCTTCCAACTGTCATTGAGCTCCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGCTGGGTGAAGATGATGCTGTCCCGGAGAGCTGCTTCCAACTGTCATTGAGCTCCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGCCCTATGGGAGGAGGGCTCAGGCTCACTCTTTCAGGAAGCGCCCAGCCCTAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTGGTGTGGTGAGCTGGGGTGAAGGCTGCGCTCAGAGGAACAAGCCAGGCGTGTACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361 ACACTGACGACATTTATGCTGTGGCCTCCCCCCCCAACACACAACCCAGACTGTGAACTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGTGCTAGCGGCCCCAGCCTGGGGGGTTTGATGGCGGCCTTCCCCCTCTAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCAGAAAAGAGGGTACCTAAGGCTGAAATTGTTTTGCTGTTGCCCAGGGGTGGTTTT
                                                                                                                                                                                                                                      /dev_stage="blastocyst"
/clone lib="RIKEN full-length enriched, blastocyst"
193 c 224 g 155 t 2 others
                                                                                                                                                                                                                                                                                                                                                                                                          Score 739.2; DB 14; Length Pred. No. 9.3e-135; O; Mismatches 5; Indels
                                                              /organism="Mus musculus"
/mol_type="mRNA"
/strain="C57BL/63"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGAGTAAAACATTTTATTTTTTT 3088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         746
                                                                                                                                                                       /db_xref="taxon:10090"
/clone="I1C0035F06"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGAGTAAAACATTTTATTTCTTTT
Location/Qualifiers
1. .746
                                                                                                                                                                                                                                                                                                               224 g
                                                                                                                                                                                                                                                                                                                                                                                                          23.8%;
al Similarity 99.3%;
741; Conservative
                                                                                                                                                                                                                                                                                                               ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3063
                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3003
                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                             source
                                                                                                                                                                                                                                                                                                            BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 12
BI416218
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ठे
                                                                                                                                                                                         Namidatis butterial Kouchilary Sciurognath; Milidae; Mulliade; Mulliade; Mulliade; Mulliade; Mulliade; Mulliade; Mulliade; Mikaido, 1., Osato, N., Saito, R., Suzuki, H., Yamanaka, I., Kiyosawa, H., Yaqi, K., Tomaru, Y., Hasegawa, Y., Nogami, A., Schombach, C., Gojobori, T., Baldarelli, R., Hill, D. P., Bult, C., Hume, D.A., Quackehbush, J., Schrimi, L.M., Kanapin, A., Matenda, H., Batalov, S., Beisel, K.W., Blake, J.A., Dagani, T.A., Fletcher, C.F., Forrest, J.E., Cousins, S., Gasterland, T., Gariboldi, M., Gissi, C., Godzik, A., Frazer, K.S., Gasterland, T., Gariboldi, M., Gissi, C., Godzik, A., Frazer, K.S., Gasterland, T., Gariboldi, M., Gissi, C., Godzik, A., Frazer, K.S., Manatincich, S., Hirokawa, N., Jackson, I. J., Jarvis, B.D., Kanai, A., Multais, L., Marchioni, L., McCharie, J., Maltais, L., Marchioni, J., McGasterski, R.M., Frazer, K.S., Ravasi, T., Redi, D.J., Reidi, J., Ring, B.L., Ronagaya, A., Kurochkin, T.V., Lee, Y., Lenhard, B., Lyons, P.A., Maltais, L., Marlais, L., Marchioni, L., McGaster, G., Ravasi, T., Rede, D.J., Reidi, J., Ring, B.C., Ravasi, T., Pontius, J.U., Qi, D., Ramachandran, S., Ravasi, T., Rede, D.J., Reidi, J., Ring, B.C., Ravasi, T., Raper, J., Wallestedt, C., Wang, Y., Walsen, M., Vang, I., Yang, I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), Yokohama Institute
The Institute of Physical and Chemical Research (RIKEN)
1-7-22 Stehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan Tel: 81-45-503-9222
Fax: 81-45-503-9216
Fmail: genome-res@gsc.riken.go.jp,
URL:http://genome.gsc.riken.go.jp,
URL:http://genome.gsc.riken.go.jp,
Adachi,J., Aizawa,K., Akimura,T., Arakawa,T., Carninci,P., Fukuda,S., Y., Habahizume,W., Hayashida,K., Hirozane,T., Hori,F., Imotani,K.,
Ishii,Y., Itoh,M., Kagawa,I., Kawai,J., Kojima,Y., Kondo,S., Konno,H., Koya,S., Miyazaki,A., Murata,M., Nakamura,M., Nomura,K.,
Numazaki,R., Ohno,M., Ohsato,M., Saito,R., Sakazume,N., Sano,H.,
Sasaki,D., Sato,K., Shibata,K., Shiraki,T., Tagami,M., Takeda,Y.,
Waki,K., Watahiki,A., Muramatsu,M. and Hayashizaki,Y. Direct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                encyclopedia: real-time sequence clustering for construction of a nonredundant cDNA library. Genome Res. 11 (2), 281-289 (2001) CDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Science Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Computational Analysis of Full-Length Mouse cDNAs Compared with Human Genome Sequences Mamm. Genome. 12, 673-677 (2001)
Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes. Genome Res. 10 (10), 1617-1630 (2000)
SKIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer. Genome Res. 10 (11), 1757-1771 (2000)
                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    prepare mouse tissues.
Please visit our web site (http://genome.gsc.riken.go.jp) for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Computer-based methods for the mouse full-length cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Yoshihide Hayashizaki
                                                                     Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nature 420, 563-573 (2002)
   BY756896.1 GI:27190109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         further details.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12466851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22354683
                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDLINE
PUBMED
   VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
```

TITLE

2642

240

2702

2822

420

2882

480

2942

540

```
/mol_type="mRNA"
/strain="FVB/N"
/db xref=traxon:10090"
/clone="IMAGE:4155103"
/lab host="DHOB (TI phage-resistant)"
/clone_lib="NCI CGAP_SG2"
/note="Organ: salivary gland; Vector: pCMV-SPORT6; Site_1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1116 bp mRNA linear EST 21-NOV-2000 60202796FI NCI_CGAP_SG2 Mus musculus cDNA clone IMAGE:4165103 5', BF301347
                                                                                               2106
                                                                                                                                                                                                                        2166
                                                                                                                                                                                                                                                                                                                                                  2226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2344
                                                                                                                                                                                                                                                                                                                                                                                                             539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   629
                                                                                                                                                          419
                                                                                                                                                                                                                                                                                479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Jeffrey E. Green, M.D.
Tissue Procurement: Jeffrey E. Green, M.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LIML)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/Link at:
http://inage.llnl.gov
Plate: LlAM9451 row: o column: 24
High quality sequence stop: 686.
High quality sequence stop: 686.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Craniata, Vertebrata, Euteleostomi,
Sciurognathi, Muridae, Murinae, Mus.
300 GGGCCTCGCTCACTCTCTCTGAGCTGGCTCTCTGCAGCTCATTGCTTTCAGGATGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               660 GATCCTGCAGAAAGGTGAGATCCGTGTCATCAAACCAGACCGACTGTGAGGACCTCCATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2464 GCCAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGAGAAAGATGGCGCGAATGTTCCAGG
                                                                                                  2047 AAAATTTCAAGTACTCAGACTACACGATGTGGACGGCCTTCCTGGGTCTGCTGGACCAGA
                                                                                                                                   360 AAATITICAAGIACICCAGACIACACGAIGIGGACGGCCTICCTGGGICIGGACCGGA
                                                                                                                                                                                                                        420 GCAAGCGCAGTGCCTCTGGGGTGCAGGAGCTGAAGCTCAAACGTATCATCATCACCCCTT
                                                                                                                                                                                                                                                                                                                                                  2167 CCTTCAATGATTTCACCTTCGACTATGACATCGCCTTGCTGGAGCTGGAGAAGTCGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                             480 CCTTCAATGATTTCACCTTCGACTATGACATCGCCTTGCTGGAGGAGGAGAAGTCGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           227 AGTACAGCACCGTCGTGCGCCCCCATCTGCCTGATGCTACCATGTCTTCCCTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540 AGTACAGCACCGTCGTGCCCCCATCTGCCTGATGCTACCCATGTCTTCCCTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600 GCAAAGGCCATCTGGGTCACAGGCTGGGGGCACACAAAAGAGGGGGGGTCACCGGAGGGGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2345 GATCCTGCAGAAGGGTGAGATCCGTGTCATC-AACCAGACCACCTGTGAGGACCTCATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2404 CGCAGCAGATCACCCCCACGAATGATGTGTGTGTGGGGTTTCCTCAGTGGGGGTGTGGAATCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                720 cecag-agarcaccccacgaargargrenereserrecercaereseserereser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         779 G-CAGGGTGACTCTGGTGGCCCCTTGTCAAGCGCGGAGCAAGATTGGCGAATGTTCCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus
Eukaryota, Metazoa, Chordata,
Mammalia: Eutheria, Rodentia,
1 (bases 1 to 1116)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BF301347.1 GI:11247870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 13
BF301347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                          셤
                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                          P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /Gold-type="mark" | Molicity | Mo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by:Incyte Genomics, Inc.
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM1359 row: 1 column: 19
High quality sequence start: 20
High quality sequence start: 20
High quality sequence stope: 793.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1687 AGAAGTGTAATGGGAAGGACAACTGTGGAGATGGGTCTGACGAGGCTTCATGTGACAGCG 1746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACGAGGGCGAGTGGCCCTGGCAGGTGAGCCTCCACGCCCTGGGCCAGGGCCACTTGTGTG 1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1987 GGGCCTCGCTCATCTCTCTCTGACTGGCTGGTCTCTGCAGCTCATTGCTTTTCAGGATGACA 2046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 ACGAGGCGAGTGGCCCTGGCAGGTGAGCCTCCACGCCCTGGGCCCA-GGCCACTTGTGTGT 299
                                                                                                                         Mus musculus (house mouse)
Mus musculus
Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
I (Dases I to 846)
NHF WGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 AGGGCAACCCTGAGTGTGATGGGAAGACGGACTGTAGCGATGGCTCCGATGAGAAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGATCCGCACGAGAGACACACTGTGGAGATGGGTCTGACGAGGCTTCATGTGACAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1807 AGGGCAACCCTGAGTGTGATGGGAAGACGGACTGTAGCGATGGCTCCGATGAGAAAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cDNA Library Preparation: M. Bento Soares, Ph.D., M. Fatima Bonaldo, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tch 23.8%; Score 739.2; DB 12; Length 846; al Similarity 97.1%; Pred. No. 9e-135; 816; Conservative 0; Mismatches 18; Indels 6;
                                                                                                                                                                                                                                                                                                                                                                            Contract: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Gilbert Smith, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           organism="Mus musculus"
                                    BI416218.1 GI:15177141
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .846
                                                                                                                                                                                                                                                                                                                                                  Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BASE COUNT
ORIGIN
                                                                                                                                SOURCE
ORGANISM
                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
JOURNAL
                                       ACCESSION
                                                                 VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
```

ð a

셤

Db ð g

à

Db

à

```
1529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1469
                                                           VERSION
KEYWORDS
SOURCE
ORGANISM
 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BASE COUNT
                                                                                                                                                     REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
Not1; Site_2: Sal1; Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.3 kb. Constructed by Life Technologies. Note: this is a NCI_CGAP Library."

3.15 c 3.29 1.74 t
                                                                                                                                                       1196
                                                                                                                                                                                                                                                                                  1316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1676
                                                                                                                                                                                                                     1256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTCAGAGCCAGAAGTGTAATGGGAAGGACAACTGTGGAGATGTGGCTCTGACGAGGCTTCA 1736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1797 TGTCTGAGCAAGGGCAACCCTGAGTGTGATGGGAAGACGGACTGTAGCGATGGCTCCGAT 1856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1914 GGCACGAATGCG----GACGAGGCGAGTGGCCCTGGCAGGTGAGCCTCCACGCCCTGGG 1969
                                                                                                                                                                                                                                                                                                                                              1317 AGCAGCAACAGCAGCAAGATTACAGTCCACTTCCATTCTGATCACTCGTACACGGACACC 1376
                                                                                                                                                                                                                                                                                                                                                                                                             GGGTTCCTAGCTGAGTACCTCTCCTACGACTCCAACGACCCGTGCCCAGGGATGTTCATG 1436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1437 TGCAAGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGGGCAGACTGCCCG 1496
                                                                                                                         2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rereacadecreaarererererereacadararaceraceareceaaaaagecere 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661 IGTCTGAGCAAGGCCACCCTGAGTGTGAGGGGAAAGACCGACTGTACGAATGGCTCCGCA 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                    AAGGACTATGTGGAGATCAACGGGGAGAACTACTGCGGTGAGAGGTCCCCAGTTTGTGGTG 180
                                                                                                                                                                                                                                                                                                                                                                AGCAGCAACAGCAAGAAGATTACAGTCCACTTCCATTCTGATCACTCGTACACGGACACC
                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGTTCCTAGCTGAGTACCTCTCTACGACTCCAACGACCCGTGCCCAGGGATGTTCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGTTCTGCAAGCCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGTGGGGGACGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACGAGGAGGCTGCAGCTGTCCTGCTGGAGTTTCAAGTGTTCCAATGGGAAGTGTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTCAGAGCCAGAAGTGTACTGGGAAAGAACTGTGGAGATGGGTCTGAAGAGGCTTCA
                                                                                                                                                                                                                     AAGGIGCGCITCAAACICTTCTATCTGGTGGACCCCCAACGTACCAGIGGGCTCCTGCACC
                                                                                                                                                                                                                                                  61 AAGGTGCGCTTCAAACTCTTCTATCTGGTGGACCCCAACGTACCAGTGGGCTCCTGCACC
                                                                                                                                                                                                                                                                                  1257 AAGGACTATGTGGAGATCAACGGGGAGAAGTACTGCGGTGAGAGGTCCCCAGTTTGTGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCAAGACTGGACGGTGCATCCGAAAGGAACTGCGCTGCGACGGCTGGGCAGACTGACCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACGAGGAGGGCTGCAGCTGTCCTGCTGGGAGTTTCCAAGTGTTCCAATGGGAAGTGTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721 GGACAAACACACTGGGGACTGTGGGGCAGCGATCCTTTACCAAACAGGATCAGGTGACAGGT
                                                                                                                                                        CACTACCCGCCCAACATCAACTGCACATGCAATATCAAGGTGCCCCAACAACGGGAACGTG
                                                                                                                                                                                      CACTACCCGCCCAACATCAACTGCACATGGAATATCAAGGTGCCCAACAACGGAACGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGTTCTGCAAGCCCCTCTTCTGGGTCTGTGACAGTGTCAACGACTGTGGGGACGGAAGT
                                                                                                                         Gaps
                                                                                                                    1 7 ;
                                                                                           DB 10; Length 1116;
                                                                                                                         Indels
                                                                                           Score 735.8; DB 10;
Pred. No. 3.9e-134;
0; Mismatches 62;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCAGGGCCACTTGTGTGGGGCCTCGCTCA 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACAGGCCAATGAGTGGAACCCCTAGCA 869
                                                                                          Query Match
23.7%;
Best Local Similarity 92.1%;
Matches 800; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    မ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1857 (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1970
                                                                                                                                                        1137
                                                                                                                                                                                      Н
                                                                                                                                                                                                                     1197
                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                             1377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1677
                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                               BASE COUNT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ΩD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                    d
                                                                                                                                                                                                                                             Db
                                                                                                                                                                                                                                                                                                               Ωp
                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          면
                                                                                                                                                        à
                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                              ð
```

RESULT 14 BI646380

```
/ observations muscullus...
//mol type="muscullus"
//mol type="muscullus"
//strain="129,C57BL/60,FVB/N"
//do xref="texcon:10090"
//clone="InAGE:5316539"
//dev stage="tul0" months"
//dev stage="tul0" months"
//dev stage="tul0" months"
//dev stage="DH10B"
//dev stage="DH10B"
//dev stage="tul0" months"
//dev stage="tul0" months"
//dev stage="tul0" months"
//done lib="NCI CGAP Mam3"
//done lib="NCI Cloned unidirectionally. Primer: Oligo dT.
Site=2: Nort; Cloned unidirectionally. Primer: Oligo dT.
Library constructed by Life Technologies. Investigators
providing samples: Lothar Hennighausen/Chu-Xia Deng, NIH
Reference for transgenic model: Xu et al., Nature Genetics
22, 37-43 (1999)."
BI646380 786 bp mRNA linear EST 12-SEP-2001 603276244F1 NCI_CGAP_Mam3 Mus musculus cDNA clone IMAGE:5316539 5', mRNA sequence.
BI646380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGTGTCAACGACTGTGGGGAACGAAGTGACGAGGAGGCTGCAGCTGTCCTGCTGGGAG 1648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTCAAGTGTTCCAATGGGAAGTGTCTCCCTCAGAGCCAGAAGTGTAATGGGAAGGACAA 1708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGTGGAGATGGGTCTGACGAGGCTTCATGTGACAGCGTGAATGTCGTCTCTTGCACCAA 1768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240 TITICAAGIGITICCAATGGGAAGIGICTCCCCCCAGAGCCCAGAAGTGTAATGGGAAGGACAA 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mus musculus (house mouse)
Mus musculus
Mus musculus
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Musmania: Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 786)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Email: cgapbs.remail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Chu-Xia Deng Ph.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAMINGO row: h column: 12
High quality sequence stop: 764.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1409 CAACGACCCGTGCCCAGGGATGTTCATGTGCAAGACTGGACGGTGCATCCGAAAGGAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ececreceacecresecresecresecresearrarasceargasecrraciseceargeaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180 CAGTGTCAACGACTGTGGGGACGGAAGTGACGAGGAGGGCTGCTGCTGTCCTGCTGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120 TGCCACCCACCAGTTCACGTGCAAAAACCAGTTCTGCAAGCCCCTCTTCTGGGTCTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCGCTGCGACGGCTGCCCGGATTATAGTGATGAGCGTTACTGCCGATGCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGCCACCCACCAGTTCACGTGCAAAACCAGTTCTGCAAGCCCCTCTTCTGGGTCTGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 786;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 732; DB 12;
Pred. No. 2.4e-133;
0; Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .786
/organism="Mus musculus"
                                                                                                                                            BI646380.1 GI:15560616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 23.6%;
Best Local Similarity 98.7%;
Matches 780; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
```

us-09-900-751-1.rst

g

ò d à Пb

```
840 recrisigecarceaccece--aaaacaacaacrerereaacregraceraag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2602
                                                                                                                                                                                                                                                                                                                                                                2066
                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2661
                                                                                                                                                                                                                                                                                                     2006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99
                                                                                                                    Query Match
                                                                                                                                  Best Local
                                                                      BASE COUNT
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  임
                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                                                                                                                           임
                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                               ò
                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BG915045 928 bp mRNA linear EST 05-JUN-2001 602814325F1 NCI_CGAP_Mam4 Mus musculus cDNA clone IMAGE:4936590 5', mRNA sequence.

BG915045.1 GI:14295521
                                                                                                                    1948
                                                                                                                                                                              2008
                                                                                                                                                                                                                                         2068
                                                                                                                                                                                                                                                                                                     2127
                                                                                                                                                                                                                                                                                                                                                                  2187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /olone_lib="NCI_CGAP_Mam4"
/note="Organ: mammary; Vector: pCMV-SPORT6; Site_1: SalI;
                                                                                                                                                                                                                                                                                                                                    719
                                                                                                                                                                                                                                                                        629
                            419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Musinae, Mus.
1 (bases 1 to 928)
ATATACCTACCGCTGCCAAAATGGCCTCTGTCTGAGCAAGGGCAACCCTGAGTGTGATGG
                                                                           GAAGACGGACTGTAGCGATGGCTCCGATGAGAAAAACTGTGACCTGTGGGCTGCGATCCTT
                                                                                                                    TACCAAACAGGCTCGCGTGGTTGGTGGCACGAATGCGGACGAGGGCGAGTGGCCCTGGCA
                                                                                                                                      GETERACCTCCACGCCCTGGGCCCAGGCCACTTGTGTGGGGGCCTCGCTCATCTCTCCTGA
                                                                                                                                                                                                                                         CTGGCTGGTCTCTGCAGCTCATTGCTTTCAGGATGACAAAAATTTCAAGTACTCAGACTA
                                                                                                                                                                                                                                                                                                                                    cacdaareresacescerreceresereresacescaasesacescerereses
                                                                                                                                                                                                                                                                                                                                                                  recaesascreaascreaacerarcarcaceaace--rrcrrcaarsa-rrcacerrcs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          þe
                         ATATACCTACCGCTGCCAAAATGGCCTCTGTCTGAGCAAGGGCAACCCTGAGTGTGATGG
                                                                                                                                                                               GGTGAGCCTCCACGCCCTGGGCCAGGGCCACTTGTGTGGGGGCCTCGCTCATCTCCTGA
                                                                                                                                                                                                                                                                     creecrestcretecaecrearrecrireassarcaaaaaarrreaagracreacra
                                                                                                                                                                                                                                                                                                       CACG-ATGTGGACGGCCTTCCTGGGTCTGGACCAGAGCAAGCGCAGGTGCCTCTGGGG
                                                           GAAGACGGACTGTAGCGATGGCTCCGATGAGAAAAACTGTGACTGTGGGCTGCGATCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INT-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Priscilla Furt
Ph.D.
CDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can l
found through the I.M.A.G.E. Consortium/LINL at:
http://image.llnl.gov
Plate: LLAM10869 row: a column: 07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /tissue_type="tumor, gross tissue"
/dev_stage="5 months"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Mus musculus"
/mol type="mRNA"
/strain="NMRI"
/db xref="taxon:10090"
/clone="IMAGE:4936590"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       High quality sequence stop: 793.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                             ACTATGACAT 2197
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTATGACAT 786
                                                                                                                                                                                                                                                                                                                                                                                                                                                        177
                            360
                                                           1829
                                                                                                                                                  480
                                                                                                                                                                                                                                         2009
                                                                                                                                                                                                                                                                                                       2069
                                                                                                                                                                                                                                                                                                                                                                  2128
                                                                                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                                                                                                                             2188
                                                                                       420
                                                                                                                      1889
                                                                                                                                                                               1949
                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                        009
                                                                                                                                                                                                                                                                                                                                     099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 15
BG915045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
```

엄

q ò

ð

Ω ð g 8 d

à

```
Library constructed by Life Technologies. Investigators providing samples: Lothar Hennighausen/Priscilla Furth, NIH Reference for transgenic model: Li et al., Cell Growth and Differentiation 7, 3-11 (1996)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2305
                                                                                                                                                                                                                                                                                                                             1945
                                                                                                                                                                                                                                                                                                                                                                                                                                    2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             419
                                                                                                                                                                                                                                                                       7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           119
                                                                                                                                                                                                                                                                                                                                                                              9
dŢ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780 ccacadogaroccedaarocacaceredarracadogadeadogaaceacadacarea
  Primer: Oligo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGACTATGACATCGCCTTGCTGGAGCTGGAGAAGTCGGTGGAGTACAGCACCGTCGTGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ceactareacareecerrecressecresseareseareseareacacaceecerese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360 ececarcidecreecidarecraciationicarecreecidecaadecearered
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCGTGTCATCAACCAGCCACCTGTGAGGACCTCATGCCGCAGCAGATCACCCCACGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGTGTCATCAACCAGACCACCTGTGAGGACCTCATGCCGCAGCAGATCACCCCCACGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAGGCTGCGCTCAGAGGAACAAGCCCCAGGCGTGTACACCAAAGGGTCCCTGTAGTTCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTGGATCAAAGAGCACACTGGGGTATAGCAGCATGGA-CAGACAGCCGACCACAAACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACTGGATCAAGAACACACTGGGGTATAGCAGCATGGACCAGACAGCGACAACACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCACAGGGATGCCCGACATGCACACCTGGAT----ACAGGAGAGGAACACTGACGACATTT
                                                                                                                                                                                                                                                                                                                             1886 CTTTACCAAACAGGCTCGCGTGGTTGGTGGCACGAATGCGGACGAGGGGGAGTGGCCCTG
                                                                                                                                                                                                                                                                                                                                                                                 61 ecasereacerecacecereacecea-acecacriterereacecerecterere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGACTGGCTGGTCTCTGCAGCTCATTGCTTTCAGGATGACAAAAATTTCAAGTACTCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120 TGACTGGCTGGTCTCTGCAGCTCATTGCTTTCAGGATGACAAAATTTCAAGTACTCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTACACGATGTGGACGGCCTTCCTGGGTCTGGACCAGAGCGAAGCGCAGTGCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTACACGATGTGGACGGCCTTCCTGGGTCTGCTGGACCAGAGCAAGCGCAGTGCCTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gergeangeagereaaacerareareareereacereerreerrearearerre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCCATCTGCCTGCTGATGCTACCCATGTCTTCCCTGCTGGCAAGGCCATCTGGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGCTGGGGGCACACAAAAGAGGGAGGTACCGGAGCGCTGATCCTGCAGAAGGGTGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCTTGGGGCCCCACACAAAGAGGGAGGTACCGGGAGCGCTGATCCTGCAGAAGGGTGAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATGTGTGTGGGGTTTTCCTCAGTGGGGGGTGGGACTCCTGCCAGGGTGACTCTGGT--GGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATGTGTGTGGGTTTCCTCAGTGGGGGTGTGGACTCCTGCCAGGGTGACTCTGGTTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCCTTGTCAAGCGCGGAGAAAGATGGGCGAATGTTCCAGGCTGGTGTGAGCTGGGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ccriercaaagcecesaaaagareeceaarerrccaescresrererseagcressr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAAGGCTGCGCTCAGAGGAACAAG-CCAGGCGTGTACA-CAAGGCTCCCTGTAGTTCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                    1946 GCAGGTGAGCCTCCACGCCCTGGGCCCACTTGTGTGGGGGCCTCGCTCATCTCTCC
                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2718 ATGCTGTGGCCTCCCCCCCCCAACACACACCCAGACTGTGAACTGCATCCTTAG 2770
                                                                                                                                                                                                                                                                       11;
                                                                                                                                                                                                                   Length 928;
                                                                                                                                                                                                                                                                       Indels
Site_2: NotI; Cloned unidirectionally.
                                                                                                                                                                                                                 Match 23.2%; Score 721; DB 12; Local Similarity 93.2%; Pred. No. 3.3e-131; les 832; Conservative 0; Mismatches 50;
```

Search completed: February 21, 2004, 07:12:09 Job time : 6230 secs